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THE
Archaeological Journal,

PUBLISHED UNDER THE DIRECTION OF

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OF

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FOR THE ENCOURAGEMENT AND PROSECUTION OF

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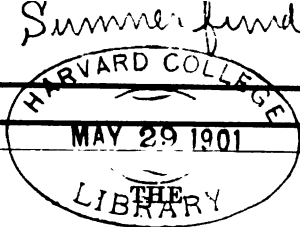
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The first Meeting of the Session 1900-1901 was held on the first Wednesday in Nov. 1900; and such Meetings will be held at 20, Hanover Square, on the first Wednesday of the month (January excepted), November to July inclusive. The proceedings commence at 4 P.M. Any Member is at liberty to introduce a friend.

A desire has been expressed, by persons who have recently joined the Institute, to obtain the earlier volumes of the *ARCHÆOLOGICAL JOURNAL*, in order to become possessed of the complete series. The first five volumes, published by Messrs. Parker, London and Oxford, 1844-1848, may be procured through any bookseller. MEMBERS have special facilities in regard to the purchase of the subsequent volumes, VI. to LVI. inclusive; also in regard to the Transactions at the Annual Meetings, and other publications of the Institute.

(See list of Publications, page 3 of this wrapper.)

The general Index to the first twenty-five volumes of the Journal, brought into shape by the late Mr. Burt, and completed by Sir John Maclean, may be obtained from the Secretary, price 10s. 6d.

Cloth cases for binding the Journal may be obtained at the office of the Institute, price 1s. each.

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Communications respecting the *Archæological Journal* should be addressed to the Secretary,
Royal Archæological Institute, 20, Hanover Square, London, W.

THE GILBERTINE PRIORY OF WATTON, IN THE
EAST RIDING OF YORKSHIRE.

By W. H. ST. JOHN HOPE, M.A.

Watton is a small village in the wapentake of Harthill in the East Riding of Yorkshire, about eight miles due north of Beverley, and some five miles south of Driffild. It lies at the foot of the wolds, on the edge of the broad alluvial flat extending from Driffild to Hull.

According to Tanner,¹ and other writers, there was a nunnery here about 686; but the only authority for this statement seems to be an account by Bæda² of a miracle wrought by St. John of Beverley after he became bishop of York in 705, on a visit “ad monasterium virginum in loco qui vocatur Uetadun, cui tunc Heriburg abbatissa præfuit.”

Æthelred or Aelred, abbot of Rievaulx, 1146 to 1166, in his description of another “notable miracle” wrought at Watton in his time, thus describes the place, which was then evidently considered identical with the “Uetadun” of Bæda:

Inter monasteria virginum quæ vir venerabilis ac Deo dilectus pater et presbyter Gilelbertus per diversas Angliæ provincias miro fervore construxit, unum in provincia Eboracensi situm est in loco qui aquis et paludibus septus ex re nomen accepit. Dicitur enim WATTON, id est *humida villa*. Qui quondam, ut refert in historia Anglorum venerabilis presbyter Beda, magno sanctarum mulierum pollebat examine: ubi et beatus pontifex Johannes puellam ob incautam sanguinis diminutionem fere desperatam salubri tactu et oratione sanavit. Quoniam igitur in eodem loco prædicti patris industria renovatur antiqua religio, antiqua nichilominus miracula renovantur.³

Of the Saxon monastery there is no further record. If such actually existed at Watton it had ceased to be at the time of the Norman Conquest, inasmuch as there

¹ Thomas Tanner, *Notitia Monastica*, ed. Nasmith (London, 1787), s.v. Yorkshire, cxx.

² *Hist. Ecclesiast. Gentis Anglorum*, lib. 5, cap. 3.

³ *Historia Anglicana Scriptores Decem* (London, 1752), i. col. 415.

is no mention of it in Domesday Book, though Watton then possessed a priest and a church.

The existing parish church, which dates from the thirteenth century and onwards, stands within the precinct of the priory. This is roughly an oblong area, bounded and intersected by a series of banks and ditches, and containing about forty-two acres. If an older monastery stood here, some of these earthworks may be of Saxon origin, but the construction of such enclosures was the first duty of every Gilbertine monastery.

Previous to the draining of the country the site of the priory no doubt corresponded with Aelred's description.

The Gilbertine Priory of St. Mary at Watton is said to have been founded about 1150 by Eustace FitzJohn, who, with Agnes his second wife, certainly gave "to the nuns who serve God at Watton" the vill of Watton itself, and other possessions. The various charters printed by Dugdale in the *Monasticon Anglicanum*¹ say nothing as to Eustace FitzJohn being the founder, and it may be that Aelred's statement concerning Gilbert the priest refers to the establishment by him of a monastery at Watton, which was afterwards endowed by Eustace FitzJohn.

Of the history of the monastery down to its suppression practically nothing is known, but it was then in a flourishing condition, its clear value being reckoned at £360 18s. 10d., an amount exceeded by only seven other Yorkshire houses.

The Priory was surrendered on 9th December, 31 Henry VIII. (1539), by Robert the commendator,² Thomas Webster the sub-prior, and seven other priests, with Joan Warcoppe, prioress, Agnes Warner, prioress, Anne Ellerker, sub-prioress, and eleven other nuns. The Pension List gives the names of nineteen more nuns, making thirty-three in all, and nine sisters. The signatures of the nuns in the deed of surrender are all written in one hand.

The Order of Sempringham, as it was called, to

¹ Ed. Caley, Ellis, and Bandenel (London, 1830), vi. part ii. 955-957.

² Robert Holgate, bishop of Llandaff, afterwards archbishop of York, who held the priory *in commendam*.

which the Priory of Watton belonged, was founded about 1139 by Gilbert, rector of Sempringham and Tirington,¹ owing to the desire of seven maidens, who lived in Sempringham, to lead a strict religious life. Gilbert accordingly built for them a cloister and offices on the north side of and adjoining the parish church of Sempringham, and to this monastery they retired. These first nuns of the Order were completely secluded from the outer world, and with it they held communication by means of a window only, through which necessary things could be introduced. Their needs were supplied from without by certain poor girls, serving in secular habit. But these subsequently became lay sisters, who lived in the monastery and there attended to the wants of the nuns. Gilbert also established a body of lay brothers to see after the external affairs of the nuns, their farms, etc.

Other houses beginning to be founded on the same model, Gilbert drew up the Rule. This, which is printed at length in the last edition of Dugdale's *Monasticon Anglicanum*,² opens with a chapter by Gilbert narrating his establishment of (1) the nuns and (2) the lay brothers and sisters, all of whom followed the strict and austere Rule of St. Benedict as observed by the Cistercian Order.

Owing to the multiplication of houses of the new Order, chaplains became necessary, and these were to be canons, following the Rule of St. Austin. They were not to have any access to the nuns, except to those who were dying and in need of unction and the last rites of the Church, and then only in places specially appointed for the purpose in the church and infirmary, and in the presence of many on each side. They were even to sing mass with a wall interposed, so that the canons and nuns could neither see nor be seen by one another. The church of the canons, where they kept the hours, etc. and their house and cloister were to be disjoined and shut off from the court and enclosure of the nuns, as was also the

¹ Probably "West Teryngton," which belonged to the sister house of Bullington at the Suppression; now called West Torrington.

² Vol. vi. part ii. *v.-*xev.

lodging of the *conversi* or lay brothers. The nuns were responsible for the clothing and sustenance of the canons, as well as the lay brothers; and four discreet canons, proctors (*procuratores*) as they were called, viz. the prior, the cellarer, and two *illiterati*, looked after the external business affairs of the house. The proctors had charge of all sheep and other animals, and were to know their number, etc.

The prior of Sempringham, if unable from pressure of other matters to visit the other houses, might appoint two canons and a lay brother as scrutators, and likewise two lettered nuns and one unlettered to visit the nuns.

As the nuns were strictly secluded, all business between them and their proctors was arranged *ad fenestram sororum*, and at it all moneys were paid in or out. One of the cellarer's officers was known as *frater fenestree*, and acted as the medium of communication between the nuns and the canons. Two trustworthy nuns at least were assigned to attend to the great turning window (*magna fenestra versatilis*), one of whom did the necessary talking and gave out victuals, etc. thereat. This window was in a place called the window-house (*domus fenestree*).

In each house of the Order there were to be at least seven canons, and never more than thirty, unless means allowed it. They were to hold the office of clerks at masses and the hour services. No boy was to be taught letters within the monastery unless a novice. None could be received as a novice under the age of fifteen, nor become a canon under twenty. In each house two laymen *magnae auctoritatis*, or even more, might be received. Every canon had three shirts (*tunicae*), a pilch or cassock (*pellicea*) of sheep's wool, and a white cloak; also a cap, two pairs of boots and socks, and day and night socks; also a linen (quire) cope. In cloister and in the frater they wore their cloaks. At labour they wore white scapularies. The canons kept chapter, etc. like other Augustinians. All their churches were to be dedicated in honour of the Blessed Virgin Mary, and all sculptures and superfluous pictures in them were forbidden. Only painted crosses

might be used. On feast days a sermon was to be preached in the nuns' church (*in ecclesia monialium*), a carpet or cloth being hung up between the two sexes.

The fraters of the canons and lay brethren were to be so constructed that the victuals could be served to them by the nuns or sisters *per fenestras versatiles*. These were to be so made that the men could not be seen by the sisters, nor the sisters by the men. There were to be one cellar and one kitchen for all, under the care of the prioress and nuns. A fire was allowed in the frater in winter. All flesh meat was forbidden, except in the infirmary. The warming-house (*calefactorium*) might not be entered without leave. The dorter could be entered at any time without leave, but with hoods drawn. When visiting the reredorter (*domus necessaria*), the canons were to cover their faces as much as possible. The chief officers among the canons were the prior, cellarer, sub-prior, and sub-cellarer; the last named had charge of the guests.

The lay brothers seem to have been farm labourers, serving men, workmen, etc. and for the most part to have lived at the granges under the supervision of a granger.

From the moneys of the nuns there were to be reserved three marks every year to inclose their houses with a ditch and a wall or hedge, until there be security of complete seclusion, and no expense was to be spared to prevent the nuns being seen or accessible. No one was allowed to enter their court (*curtus*).

The nuns were governed by three *præpositæ* or prioresses, under whom were a *sub-præposita* or sub-prioress, a cellaress, etc. They could talk with their parents and others, always in the presence of one or more witnesses, at a window as long as a finger and as broad as a thumb, and bound round with iron. The window at which they made their confessions was similar.

Each nun had five smocks, three for labour, and two cowls for use in cloister, church, chapter, frater, and dorter; also a scapulary for labour. Each had further a pilch of sheep's wool, and a chemise of thicker stuff,

if she wished, with a linen kerchief (*mitra*) dyed black and furred with lamb's wool. All headgear was to be black and thick, as were also their veils.

The nuns received holy water and the pax (*lapis pacis*) "ad fenestram," and probably by means of the same window the nuns were communicated. The nuns were not allowed to sing in church or to talk Latin.

On fourteen occasions during the year a solemn procession was made round the nuns' cloister in this order: first, the bearer of the holy water; then the cross-bearer and taperers, followed by the censer-bearer; then the deacon carrying the Gospel book and relics, with the rest of the canons, the novices going first. After them came the seculars, if there were any. The lay brethren followed, the seniors going first, except two old men who came after the novices. Then came the *præpositae* of the nuns, followed by the rest in order of seniority; then the sisters after the novices, and then the novices of the sisters. Two elderly sisters, not veiled, brought up the rear. During the procession, doors constructed between the altar of the nuns and themselves were closed during the passage of the men, lest they should see or be seen by the nuns in passing. Similarly veils were placed across the four corners of the cloister, and curtains were extended by rings along the sides of the cloister, so that none could see across.

The nuns kept cloister and chapter as in other Orders.

There was a guest-house for women within the nuns' court, with an oratory or chapel in it for the use of the inmates.

The Statutes end with a direction "De Numero Sanctimonialium fratrum et sororum" allowed to each house. At Watton the brethren were not to exceed 70, nor the nuns and sisters 140. These are the highest numbers, those of Sempringham being 60 and 120, and Chicksands 55 and 120. Watton was, therefore, the largest house of the Order. It is clear that nuns and canons lived in distinct houses, separated by a considerable interval, each containing its own cloister, church, chapter-house, dormitory, refectory, guest-house, infirmary, etc. The two houses were probably connected by a corridor or gallery in which was the *domus fenestrate*. The nuns'

church was the principal one, and had separate accommodation for both sexes.

The Gilbertine monasteries in England, according to Dugdale,¹ were twenty-six in number. Of these eleven were in Lincolnshire, five in Yorkshire, three in Cambridgeshire, and two in Wiltshire; while Bedfordshire, Nottinghamshire, Norfolk, Oxfordshire, and Hertfordshire contained each one. Only half the number began with nuns and canons, the other half being apparently houses of canons only. At the Suppression only three surrenders were signed by nuns and canons, those of Chicksands (Beds.), Watton (Yorks.), and Shouldham (Norf.).²

Apart from such information as could be derived from the Statutes, nothing was known until lately of the actual arrangement of a Gilbertine monastery, or the disposition of its cloisters and buildings. Of Sempringham nothing is left but part of the parish church. At Malton some of the monastic buildings exist in and beneath a modern-looking house, and the greater part of the nave of a considerable church is standing and in use, but its plan presents nothing unusual. At Chicksands part of a late cloister remains, together with the western range, incorporated in a modern mansion, but there is not enough to show whether we have here part of the nuns' or the canons' buildings. With the exception of an interesting block at Watton, there does not seem to be anything of importance on the site of any other Gilbertine priory.

Shortly after the formation of the East Riding Antiquarian Society in 1892, a project was brought forward for excavating the site of Watton Priory. The chief reasons for this were threefold. In the first place, it seemed probable that as Watton had remained a double house from its foundation to its suppression, its ground plan would illustrate the peculiar arrangements of the Order. In the second place, the site was temptingly free and open, and the only buildings on it had evidently formed part of the monastery. And in the third place,

¹ *Monasticon Anglicanum*, vi. part ii. s.iv.

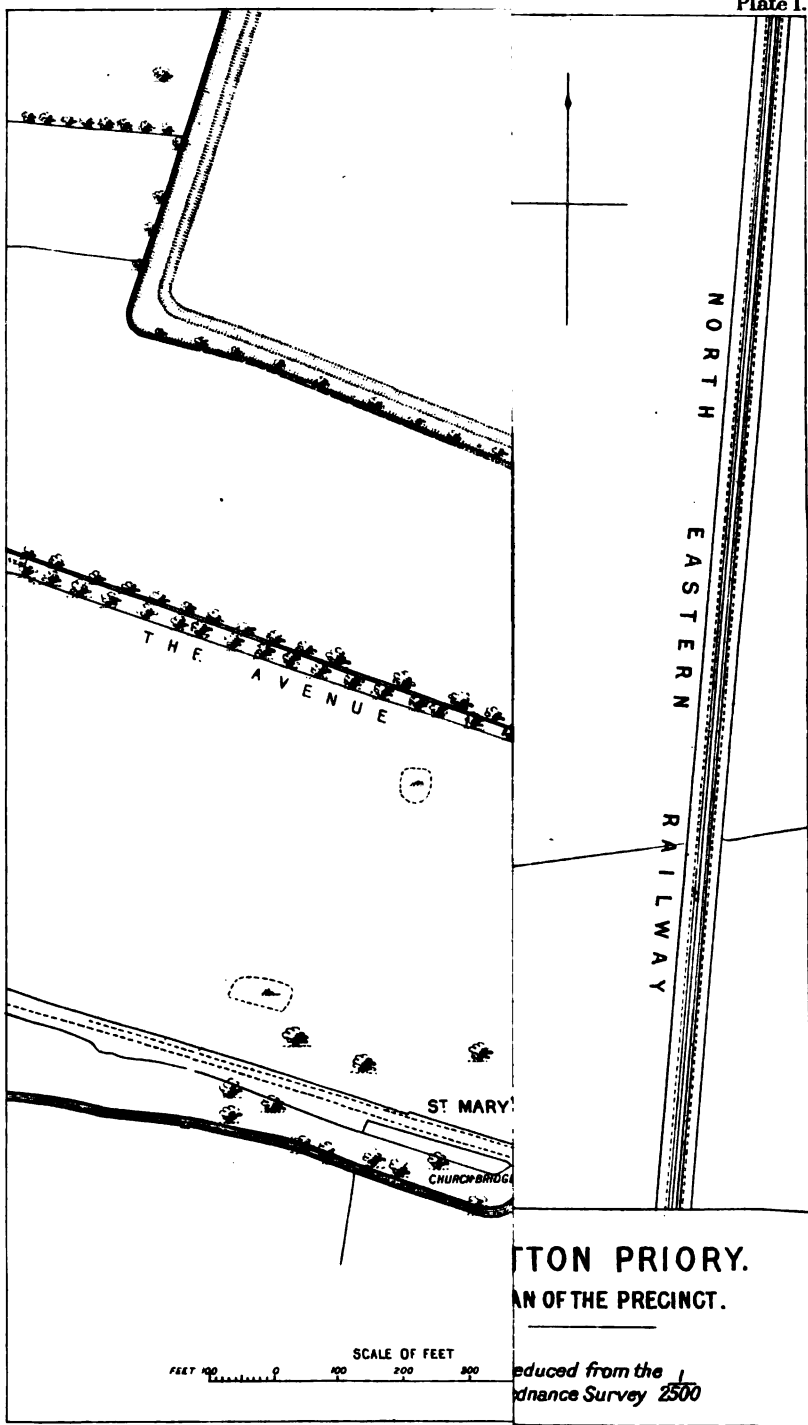
² Miss Rose Graham has pointed out to me that nuns as well as canons appear

also in the pension lists of the priories of Alvingham, Bullington, Cattley, Haverholme, Sempringham, and Six-hills.

the discovery, in the Public Record Office, of a survey taken at the Suppression, which enumerated various buildings and their dimensions, promised to afford useful information during the progress of the work.

By the kind permission of the owner, Mr. William Bethell, and of Mr. Richard Beckett, the tenant of the "Abbey," as it is now called, excavations were begun in September, 1893, under the direction of the writer and the Rev. Dr. Cox, in the pasture west of the present house, where the irregularities of the ground promised good results. The excavations soon brought to light the foundations of the priory church and the site of a cloister, but the further elucidation of the plan had to be postponed until the next year. In September, 1894, the church was further explored, as well as the buildings surrounding the cloister adjoining it, but no traces could be found of a second cloister, or any other group of buildings. Some additional excavations made by the writer the following Easter led to the tracing of certain walled enclosures east of the cloister, and a few other details, but the other buildings still remained undiscovered. The interest attaching to the search was enhanced by the fact that it had been noticed, on comparing the survey with the plan, that the dimensions therein given did not in any way correspond to those of the buildings already laid bare, and that it must refer to the missing cloister. As the outcome of a more careful consideration of the plan, the site, and the existing buildings, a final search was made in Whitsun week, 1898, to the north of the present house, and here the long sought for cloister was successfully traced, together with the remains of the buildings that surrounded it.

Many of the buildings uncovered were unfortunately reduced to mere foundations, and in places even these had been destroyed. The chalk of which the walls were largely constructed had been burnt for lime, and most of the ashlar work had been torn out from the doorways and other places. Owing to the scarcity of building material in the district, as much as possible of the wrought and moulded stonework had been removed, and in consequence it is difficult to assign dates to many parts of the buildings. So much as could be made out



has been laid down on the plan, but many points for the present must remain unsolved, since funds did not permit of so complete an excavation as was desirable.

THE NUNS' COURT.

As will be seen from the plan (Plate I.) the southwestern quarter of the site described above is practically cut off from the rest by ditches on all four sides, as if to form a precinct in itself. In the centre of this stood what was no doubt the house and court of the nuns. It consisted of a cloister, with the church on the south, the chapter-house and warming-house, etc. on the east, the frater on the north, and a western range with buildings extending from it westwards. The kitchen stood semi-detached on the north-west.

The *claustrum* or cloister was oblong in form, and measured 98 feet from east to west and 113 feet from north to south. The centre was a grass plat surrounded by covered alleys, but of these no remains were found to give any clue to a date. The east, north, and west alleys were chiefly passages, with doorways opening from them into the various offices round the cloister. The south alley was practically the living room of the nuns, where they sat and read when not engaged in the church or elsewhere.

The church was 206 feet long, and consisted of a presbytery, central tower, and nave, a north transept with two eastern chapels, and a broad south aisle extending the length of the church, with a south transept, a south chapel, and another adjunct opening out of it. The arcade dividing the main part from the aisle seems to have stood upon a wall of some height, part of which remained towards the east, and thus formed a barrier between one half of the church and the other. Previous to the excavations nothing was visible above ground, and the eastern part was found to be ruined to its plinths. It was impossible on account of large trees to fully investigate the south transept. To the west of it the walls were standing to a height of over 6 feet as far as the west end, but the outer facing had been removed throughout, and the west wall had

been stripped within as well.¹ The chapels east of the north transept had been entirely destroyed, as had the corresponding work on the other side of the church. In the face of such destruction it is difficult to make out the precise arrangements of so curious a plan.

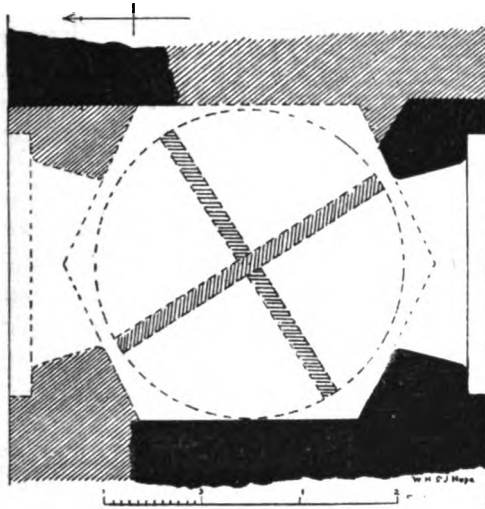
The presbytery was $26\frac{1}{2}$ feet wide and of two bays, divided midway by four steps extending right across. These led up to the altar platform, which was paved with chalk blocks, but we did not find any traces of the altar. On the south was a wide opening into the aisle,² where a similar chalk platform existed at the same level as the other, but of the steps up to it only the lowest was left. A few feet to the west of the opening there were the remains in the wall of a somewhat curious construction. On the north side it had been partly destroyed, but on the south a good deal was left. It consisted of two rebated apertures, one on each side of the wall, with gradually converging sides, opening into a central hexagonal recess. The bottom of this had been removed, and as only the lower portion of the construction was left it is not easy to see what it was for. Since its sill was nearly $3\frac{1}{2}$ feet above the floor, the recess was evidently made to put something into, and it not improbably formed a *fenestra versatilis*, and contained a turntable or wheel for passing things from the canons to the nuns on the other side of the wall. Through such a window the holy water and the pax, for instance, could easily be passed, and, as will be seen from the accompanying diagram, a turntable of the simplest form would effectually prevent anyone seeing through the contrivance.

Westwards of the lowest step in the presbytery, and level with it, were the remains of a floor of chalk blocks. The north wall contained a doorway into the transept chapels. Just to the east of this there had been inserted, about the middle of the fourteenth century, a most sumptuous canopied tomb. It had contained the effigy of a knight in armour, whose body had been laid to rest

¹ The west wall was laid open on both sides, but of the western half of the south wall only sections were examined.

² The chalk floor of the altar platform was continued through the opening, which bore no signs of a door or barrier of any kind.

in a walled grave beneath,¹ surmounted by an ogee canopy of the same character and workmanship as the beautiful monument of Lady Eleanor Percy in Beverley Minster. Many pieces of the canopy were found as they had been thrown down by the destroyers, but of the effigy such fragments only remained as had been roughly hacked off to make the stone more shapely



RESTORED PLAN OF THE TURN BETWEEN THE
NUNS' AND CANONS' QUIRES.

as spoil. Among these were shields charged with a bend and others with a cross.²

Of the crossing only the base of the north-east pier was left. This showed that the arches were of three orders, the innermost of which was carried by a broad semi-circular member and the others by semi-detached nook shafts.

¹ The grave was 7 feet 3½ inches long, 2 feet 2½ inches wide at the head and 1 foot 10 inches at the foot, and 3 feet 3 inches deep to the top of a brick curb forming the south edge.

² The fragments of the tomb and effigy are at present deposited in the parish church of Watton. From the arms, the tomb may be to one of the De Mauleys.

By his will dated April 10th, 1350, Gilbert de Aton, knight, desires that

if he die in Yorkshire he is to be buried "entre les bones gentz de religion a Watton," and he leaves the sum of £100 to the priory. Richard, prior of Watton, was to be one of his executors. *Testamenta Eboracensia* (Surtees Society 4), i. 62, 63. So great a benefactor ought to have had a sumptuous tomb, but the one above described cannot be identified as his, unless the shields with the cross are his arms.

From the base a stone wall about $2\frac{1}{2}$ feet thick extended westwards across the transept arch, no doubt to place the quire stalls against. But owing to the complete destruction of the western bases and the nave walls immediately beyond them, it is not possible to fix the limits of the quire itself.

Of the north transept there remained the base of the west wall, and of part of the north with the jamb of a doorway from without; also one respond of the arches that opened into the chapels, and beside it the base of a vaulting shaft.

The nave has been so ruined that little else now exists than the lower part of the north wall towards the west, and the massive chalk core of the west wall. There was no western entrance, but in the north wall a doorway on the extreme west led into the buildings there abutting on the church, and there was certainly one and perhaps two entrances from the cloister into the nave. The wall on which the arcade stood was 4 feet 11 inches thick, but it had been destroyed almost from end to end, and only some remains of it existed here and there, together with sections of the piers and pieces of capitals. The piers were apparently clustered, with capitals carved with broad-leaved volutes. There were no signs of a western respond, nor of the wall having continued up to the west wall. Possibly, therefore, it stopped against some pier or other such abutment a little in advance of the wall, and belonging to a galilee or narthex in line with the internal projections shown on the plan.

The south aisle was $19\frac{1}{4}$ feet wide, and had a stair turret in its south-east angle projecting into the church. There are no traces of any doorways from without.

The chapel opening out of the aisle was 28 feet long and 14 feet wide, and entered by a wide archway of two orders carried by clustered columns. The arch was at some time closed by a wooden screen. The altar platform remained, with part of its step and a pavement of yellow and black tiles arranged checkerwise. The block of the altar was 6 feet long and 2 feet 11 inches wide. It stood against a chalk wall, 2 feet thick, which divided the chapel from another east of it. This was

entered from the aisle by an archway like the other, of which the western respond remained. A party wall crossing this second chapel 5 feet from its west end shows that the arrangements were different from that of the other, but all the stonework here was so shivered by the action of a strong fire and dislocated and shattered by some heavy fall that it was not possible to pursue the investigations.

The greater part of the church seems, from the architectural remains, to have been all of one date *circa* 1170, but there are also traces of an earlier building of the time of the foundation of the priory beneath the later east end. The western part of the nave was also perhaps of the earlier date.

For the explanation of this we are indebted to a casual entry in the chronicle of the neighbouring Cistercian abbey of Meaux, which tells how Adam, the first abbot there (1150-1160), resigned his office after ten years and retired to Watton, "then a new monastery of virgins," intending henceforth to have leisure for God alone and choosing to lead an anker's life. "And there he remained for a long time shut up, until after a lapse of seven years, the church beneath which he dwelt was burnt, and he himself having been rescued from the fire returned to his monastery of Meaux," where he died thirteen years later and was buried in the chapter-house there.¹

It is interesting to note that, as its remains show, the church burnt in 1167 was of the same plan and extent as its successor, but it is not clear why so complete a reconstruction was necessary. Possibly the large amount of chalk used in the walling, which would partly be converted into lime by fire, may account for the fact; but the scantiness of the remains, and our lack of information as to the cause and extent of the fire, effectually hinder fuller investigation. Adam's ankerhold, if it escaped the flames, was no doubt destroyed in

¹ "Habita ergo deliberatione, decimo anno administrationis sue cedens, apud Wattonam, novum tunc virginum monasterium, intendens deinceps soli Deo vacare ac anachoreticam vitam præligens ducere, se concludit. Ibique

tamdiu mansit inclusus, donec, post septem annorum curricula, ecclesia sub qua manebat combureretur, et ipse ab igne extractus ad monasterium suum de Melsa est reversus." *Chronica de Melsa* (Rolls Series 43), i. 107.

the rebuilding. There is nothing to show where it was.

Before leaving the church, it should be noticed that a large mass of masonry, apparently of the thirteenth century, has been added at the north-east angle of the presbytery. It may have served merely as a buttress, but its size rather indicates the base of a stair turret. The north-west corner of the transept has been also strengthened by an added buttress.

There can be little doubt that the building just described formed the *ecclesia sanctimonialium* of the Statutes. The main or northern division served as the nuns' church and had their quire under the crossing, with probably the quire of the sisters in the nave. The aisle or southern division served as the quire of the canons, probably with the quire of the *conversi* in its western half. Between the two presbyteries was (1) an archway for the passage of processions, etc. and (2) a turn through which the nuns could take holy water and receive the pax and be communicated. The north transept may have been the place provided in the church where the sick nuns could be anointed, and it no doubt contained a staircase from the nuns' dormitory to enable them to come directly into church for the night offices.

Next to the transept, into which there was a doorway from it, was a chamber 12 feet wide and twice as long, with an entrance from the cloister, but the west wall has been destroyed. This was probably the *auditorium* or parlour, where such necessary conversation might be carried on as was forbidden in the cloister. It had no eastern door.

The *capitulum* or chapter-house, which adjoined the parlour, was 66 feet long and 23 feet wide. Its entrance from the cloister has been utterly destroyed, and just within it a lime-kiln measuring 12 feet by 10 feet has been made, no doubt soon after the Suppression, for converting into lime the chalk of which so much of the walls was built. The rest of the area is filled many feet deep with fallen rubbish, but we ascertained that it had a tiled floor and had been roofed in one span. At a distance of $5\frac{1}{2}$ feet from the east wall

was a raised dais, 7 inches high, paved with tile. Along the south wall was a bench table, 18 inches high and the same in width, built of chalk; it had no step in front. Along the north wall a different arrangement prevailed. Here a step 13 inches high and $2\frac{1}{2}$ feet wide led up to a bench table 16 inches high and 18 inches wide, all built of chalk. How these differing levels were returned across the east end is doubtful, owing to the destruction of the wall there. The unusual variation in the treatment of the side benches is not easy to account for, unless the nuns during chapter sat on the north and the novices facing them on the south. The exterior of the south wall was built of brick with stone courses.

The remains of the north wall suggest that the chapter-house has been lengthened by about one-third, probably in the fourteenth century.

From the chapter-house there extended northward a vaulted undercroft of five bays, about 90 feet long and $23\frac{1}{2}$ feet wide, divided into two alleys by a central row of octagonal pillars. It had been so ruined that only the lower parts of its south end and east side and a fragment of the west side remained, and from these, and the bases of three of the pillars, the probable extent of the undercroft has been laid down on plan. The east wall had in the second bay from the chapter-house a recess like a fireplace, and there were doorways from without in the third and fifth bays. This last bay seems to have been cut off from the rest by a cross wall. There were also indications of a wall having extended westwards from the base of the second pillar, and round the base were some remains of brick paving. Both the doorways noted above had stepped sills. If there was an entrance from the cloister it must have been in the second bay.

The building just described probably served, at any rate as regards its southern end, as the *calefactorium* or warming-house, where the nuns might come and warm themselves in winter; and this is to some extent borne out by the discovery of pieces of coal and charcoal on the floor level. Owing to the complete destruction of the rest of the building there is nothing to show to

what use it was put, or whether and how it was further subdivided. There was probably a passage through the third bay.

Over all the buildings described above, from the church northwards, was the usual place of the *dormitorium* or dorter. It would thus have been nearly 120 feet long and have also extended over the chapter-house.

Nothing whatever of it remains, nor is there anything to show how it was approached.

Some indications of a transverse building at the north end suggest that the reredorter, of which there are no other remains, occupied that position.

The whole of the north side of the cloister was covered by the *refectorium* or frater. Like the dorter it was on the first floor, but there is none of it left. Some idea of its plan and extent can be gained from the scanty remains of the undercroft or cellars upon which it stood. These remains consist of portions of four buttresses and as many doorways of the south wall, and some rough foundations of the north wall. When laid down on plan they show that the subvault was ten bays long, and divided into two alleys by a central row of pillars, some of the bases of which remained. The two end bays were narrower than the others and probably served as passages through the range, which was 90 feet long and 20 feet broad internally. Of the four remaining doorways, one opened out of the western passage into the cloister; the other three led from the cloister into the frater subvault. The doorway next to this western passage, from its position in the range, most likely opened upon a flight of steps leading up to the frater. The pillars of the subvault were octagonal with the angles indented, and rising directly from flat bases $20\frac{1}{2}$ inches square.

Immediately to the west of the frater, in the angle formed by it and the western range, was the kitchen. It was an oblong building about 30 feet long and 19 feet wide, standing detached from and not quite square with the main building. As in other cases, the extent and arrangements of the kitchen can only be recovered by laying down on plan its few remaining fragments.

These consisted of the foundation of part of the north wall, with the hearth of a fireplace, a length of west wall, and the south-east angle. The fireplace was about 7 feet wide, and immediately to the west of it were the remains of a stone bench, $13\frac{1}{2}$ inches wide, against the wall. There were some doubtful indications of another fireplace opposite. The west wall had a plinth along it, and as a short length of similar wall was found in place about 7 feet east of it, it seems as if a passage that width had been cut off from the kitchen proper. In the eastern end of the kitchen a space 4 feet wide seems also to have been partitioned off, probably to form a service department. The east wall is too far destroyed to retain any remains of a doorway, but as there was one opposite in the west wall¹ of the frater range, which was only a few feet distant, it is probable that meals were served into the entry there and conveyed thence up to the frater. The kitchen was most likely entered from the passage west of it, and this in turn no doubt extended southwards to the western block of buildings.

To the north of the passage were some offices with which it communicated, but of these only some scanty brick foundations remained.

From the kitchen to the church, and covering the west side of the cloister, was a range of buildings 112 feet long and about 24 feet wide, with a return westwards near its south end. Circumstances did not permit a complete excavation of this, and only the outer walls could be traced.

From variations in the thickness of these, it is clear that the range consisted of an L-shaped block which did not extend as far as the church, but was connected therewith by a building with thinner walls.

The entrance was in the north end of the west wall, through a porch about 13 feet wide, but of uncertain projection, in which would also be the door to the kitchen entry. The north side of this porch was represented by a foundation 8 feet wide in continuation of the north end of the range, which was only $4\frac{1}{2}$ feet

¹ This could not be fully opened out because of a tree.

thick, and probably contained the staircase to the upper story.

There was no other doorway in the west wall of the range.

On the cloister side there were certainly two doorways into the basement, and breaches in the wall may indicate two others. One of these openings is at the north end; the other is between the two doorways. The northern of the doorways has a much worn sill. These entrances show that the basement was divided into a series of chambers, but no traces of the partition walls were met with, nor anything to show that the bays were vaulted. The remains of the western extension of the range were too fragmentary to enable anything definite to be made out about it.

In default of other evidence as to the arrangements of a Gilbertine house it is uncertain to what use this western range was put. The basement was probably in part a storeplace, but it may also have included an outer parlour where the nuns could talk with their relations under the conditions already noticed. The rest of it was most likely occupied by the lay sisters, who, it must be remembered, were secluded like the nuns; and as it was one of their duties to attend to guests, the upper story of the range probably served, at any rate in part, as the *hospitium* or guest-house,¹ as well as the dorter of the lay sisters.

The ground story or basement of the building between the western range and the church had a doorway from without in the west wall and another on the east into the cloister. Both doorways are placed as far north as possible, as if opening into a narrow passage cut off from the rest of the room. This area south of the passage probably contained a staircase from the upper floor to give the lay sisters direct access to the church, but owing to the ruined condition of the south wall nothing definite can be said on this point. There are the remains, however, in the south-east corner, of a chalk foundation which may have served to support the

¹ "Sorores tamen hospitibus serviant, et in hospitio ministrant; et res hospitii custodiant; et in hospicio jaceant cum

opus fuerit, non moniales." *Institutiones ad moniales Ordinis pertinentes*, Cap. xxxiv.

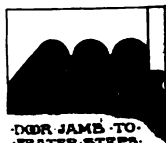
WATTON PRIOR

DETAILS OF CANONS

Fig. 10.



DOOR JAMB TO CHAPEL



DOOR JAMB TO PRATER STEPS
Fig. 1.

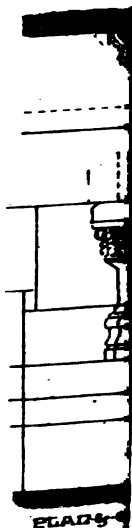


Fig. 1.

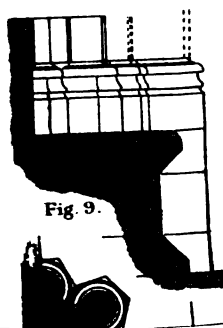


Fig. 9.

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stair. It has already been pointed out that there was a wide doorway into the room from the church.

The upper story probably contained an oratory for the use of guests, who were not allowed to enter the nuns' church. They apparently might hear the service from a gallery or closet, but were to withdraw before the nuns left their places so as to avoid being seen.¹

There is nothing to show where the nuns' infirmary stood.

From a doorway in the middle of the east wall of the dormer subvault a covered passage about 5 feet wide with thin walls led eastwards for about 80 feet to a small building of doubtful dimensions of which only some scanty fragments remained. These consisted of a wall crossing the passage, with another projecting from it eastwards, the sill of a wide doorway with two steps on its east side, and a further length of wall going southwards, from which other walls extended westwards. As the building stood midway between the two cloisters it probably also communicated with the eastern or canons' cloister by another passage leading directly to it, but this had been entirely destroyed.

From the building occupying such a position it is likely that it formed the *domus fenestrae* or window-house. This seems to have contained a very small window (*fenestra parvula*) at which conversation was carried on between the nuns and canons, and a great turning window (*magna fenestra versatilis*) through which food and other things could be passed. The opening of this window was to be less than 2 feet in height and width by three fingers' breadth all round, or about 18 inches square.² The window-house must have consisted of at least two chambers, one for the two nuns who waited at the window, the other for the canon (*frater fenestrae*) who attended on the other side, with the turn and window in the partition wall.

¹ "Hospitales vero sorores, in oratorium introducere hospites possunt, hospitibus paratum; dum moniales debitum horarum persolverint, set reducant eas antequam de choro exeant." *Institutiones ad moniales Ordinis pertinentes*, Cap. xxxiv.

² "Fenestrae autem versatiles, per quas cybaria communiter emittuntur, vix duorum pedum fiant in altitudine vel in latitudine, videlicet trium digitorum latitudine ablata hinc et inde." *Institutiones ad moniales Ordinis pertinentes*, Cap. vi.

The wall mentioned above as crossing the nuns' passage extended southwards for nearly 50 feet. It then deflected a little to the west for $31\frac{1}{2}$ feet, and finally continued with a further deflection westwards for 52 feet to the north-east angle of the nuns' church. The wall was throughout of a uniform thickness of about $2\frac{1}{2}$ feet, with a plinth on both sides. In the section next the church was another doorway. The space enclosed by the wall into which this led was probably the nuns' cemetery. It seems to have been subdivided in later times by a thin ashlar wall extending obliquely across it from north to south, just in front of the chapter-house. The object of this wall is not apparent, unless it was to shut out a possible view of the nuns from the late fifteenth century addition to the prior's lodging on the south-east.

THE CANONS' COURT.

The buildings of the canons' court, so far as they have been traced, consisted of a cloister 100 feet square, surrounded by vaulted alleys 14 feet wide, having on the east the dormer, above an undercroft containing the chapter-house, parlour, warming-house, etc. on the south the chapel, on the west the hall, and on the north the frater, which stood partly over the north alley of the cloister and partly over a vaulted undercroft parallel with it. Attached to the south-west angle of the cloister was the prior's lodging. The sites of the kitchen, the infirmary, and some minor offices have not been recovered.

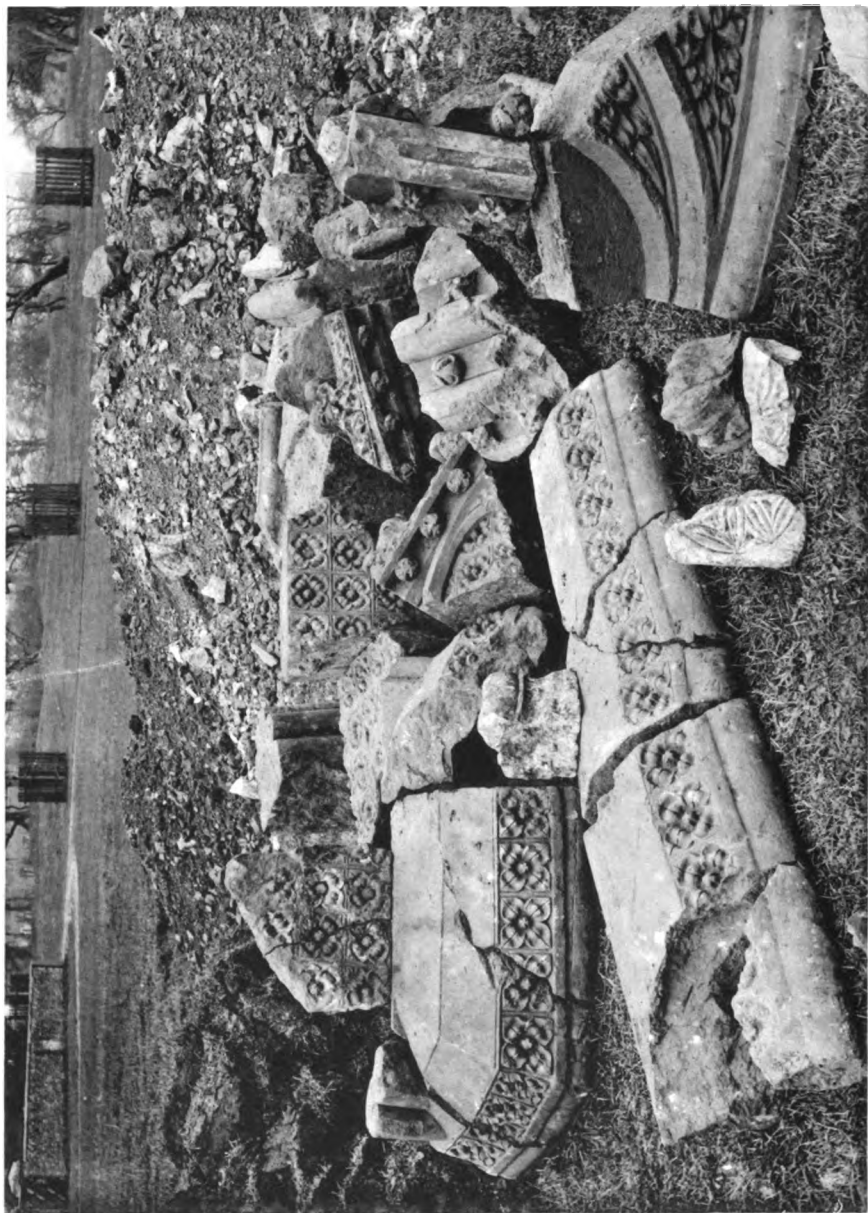
The entrance into the cloister was by a doorway (Plate II. fig. 1) with two much-worn steps, in the north-west corner, in front of which a further series of five steps, segmental in plan and projecting into the alley, led down to the cloister level (Plate III.). The west wall in which the doorway was set has been destroyed almost to its footings, but a short length remained just to the south of the entrance, with the attached bases of the shafts that carried an arch which here spanned the alley on the line of the garth north wall (Plate II. fig. 2).

The north wall of the cloister remained to a height of



**WATTON PRIORY—STEPS IN N.W. ANGLE OF CANONS' CLOISTER
AND BASE OF LAVATORY.**

To face page 21.



WATTON PRIORY—FRAGMENTS OF THE LAVATORY IN THE CANONS' CLOISTER.

several feet for most of its length. It was built of ashlar throughout, and divided into seven bays by the vaulting shafts, which stood upon a stone bench, but that in the north-west corner was placed on top of the steps there. The plan of the shafts and the section of the vaulting ribs are shown in Plate II. fig. 3. The vault was a simple one with diagonal, transverse, and wall ribs. The surface of the bench table in the seventh or westernmost bay is greatly worn. In the next, or sixth bay, the place of the bench was taken by a richly decorated lavatory. This was recessed into the wall, and had an ashlar base with eleven moulded quatrefoil panels, above which projected the bason. This had a lovely row of four-leaved flowers along the front and bevelled ends, and was no doubt lined with lead. From the bason a down pipe carried off the waste water. Behind the bason was a ledge to carry the cistern; only the ends of this remained.¹ The lavatory was surmounted by a canopy of unusual richness, with a diaper of four-leaved flowers like those on the bason, painted alternately red and white with gold centres, and a crocketed pediment with the ball-flower in the hollow of the mouldings, also decorated with colour. Some of the larger fragments,² many of which were found buried in the rubbish, are shown in the accompanying illustration (Plate IV.).

The three bays beyond the lavatory were blank. In the second bay was a doorway, of which the west jamb only remained, and beyond this the wall had been destroyed. The doorway opened into a narrow undercroft of eight bays, parallel with the cloister alley, and vaulted throughout with simple groining springing from half-octagon vaulting shafts. The plan and section of these and the vaulting ribs are shown on Plate II. fig. 6. The wall dividing the undercroft from the cloister was only 21 inches thick.

The east alley was also seven bays long, but it differed from the north in having neither bench table nor vaulting shafts. For a little more than half its length the

¹ For plan and section, see Plate II. figs. 4 and 5.

² In the absence of any local museum where these beautiful fragments could

be properly kept and appreciated, they were all carefully packed in the lavatory recess and buried again for their better preservation.

wall had been greatly ruined, but the sides of a doorway opening eastwards were left in the first bay. In the fourth and fifth bays were two other doorways placed side by side; they were both alike, and apparently of some architectural pretensions. Each was of four orders, carried by a group of shafts, the bases of which remained in good condition, and had stepped sills (Plate V. and plan and sections, Plate II. fig. 7). Beyond the doorways the wall was found standing to a height of about 4 feet as far as the angle, but there were no other openings in it.

Of the south alley we were not able, on account of modern buildings, to trace more than a short length of wall towards the east. This had a doorway in the first bay into the chapel. Between the first and second bays was a group of shafts like those adjoining the entry in the western wall, to carry an arch over the cloister alley. To the west of the shafts part of a bench table remained against the wall.

The wall towards the garth has been completely destroyed, but we uncovered the plinth of one of the buttresses on the north side, from which the cloister has been laid down on plan. The alleys seem to have been 14 feet wide throughout.

Before noticing the remains of the buildings which surrounded the canons' cloister, it will be useful to refer to the survey¹ that was made of them, for the sake of the lead, before they were dismantled.

This survey formed one of a series, of which the others are at present lost, since the covering sheet is endorsed, "A view of superfluous howses covered w^t leade in the Estridinge."

The document is undated, but for reasons presently to be given it was probably drawn up shortly after the suppression of the priory in December, 1539. It enumerates the various buildings, with their rough dimensions in yards, to which I have appended for convenience, in brackets, their equivalents in feet.

The text of the survey is as follows :



**WATTON PRIORY—DOORWAYS OF THE CANONS' WARMING HOUSE
AND PARLOUR.**

WATTON.

Este Rydinge in Com Ebor	The vewe and Certificate of all suche super- fluous howses coveryd wythe leade as doo at this Instant remayn at the late p ^l orie of Watton in the Countie afforesaide.		
	viz.		
The Dortoure	Fyrste the Dorter in lengthe	xxxvij th yeardes	[111] ¹ [Feet]
	Item in Bredthe or depthe	xij yeardes di.	[37] ¹ ₂
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	Item in depth	x yeardes	[30]
The olde dinyng chamber	Item in lengthe	xiiij yeardes di.	[40] ¹ ₂
	Item in Depthe	ix yeardes	[27]
The olde haull	Item in lengthe	xxxj th yeardes	[93]
	Item in depthe	xij yeardes di.	[37] ¹ ₂
ij Chambers caallid the haull side	Item in lengthe	xx th yeardes	[60]
	Item in depthe	vij yeardes di.	[22] ¹ ₂
The haull staires	Item in Bredthe	v yeardes di.	[16] ¹ ₂
	Item in lengthe	v yeardes di.	[16] ¹ ₂
The old Kytchen	Item about the Same in gut- ters and Spowtes wythe an olde Rouffe over the entrye leading ffrom the oute parte of the haille to the said Kyttchen con- teine by estimacon		
	} ij ffuthers leade		
A littill Chapell ioyn- inge to the olde Dinyng chambre	Item in lengthe	vij yeardes	[18]
	Item in Bredthe	iiij yeardes	[12]
The entrye leading out of the dortoure to the Jakis house	Item in lengthe	v yeardes di.	[16] ¹ ₂
	Item in Bredthe	iiij yeardes di.	[13] ¹ ₂
The [Jakis house struck out] haull syde leades	Item in lengthe	xxvij th yeardes	[81]
	Item in bredthe	v yeardes di.	[16] ¹ ₂
The lytill garner in the yarde	Item in lengthe	xviiij th yeardes	[54]
	Item in Bredthe	vij yeardes	[21]
The ffrater	Item in lengthe	xxxv th yeardes	[105]
	Item Bredthe	xj yeardes di.	[34] ¹ ₂
The Jakis house	Item in lengthe	vij yeardes di.	[22] ¹ ₂
	Item in Bredthe	iiij yeardes	[12]

The dimensions given do not represent the actual length and breadth of each chamber, but the roughly paced measurements for the valuation of the lead. In the longer dimensions these are always a few feet short

of the actual lengths, as in the frater, dorter, and chapel, but the shorter widths agree more closely with the probable measurements between the parapets, or, if in excess of this, with the sum of the slopes of a ridged roof. Buildings covered with other than lead roofs are not included in the Survey.

The first of the buildings given in the list is the canons' *dormitorium* or dorter. This no doubt formed the upper story of the eastern range, which was 118 feet long and $29\frac{1}{2}$ feet wide, but there is nothing to indicate the place of the stair by which it was reached. Nor can we at present locate the "entrie leading out of the dortoure to the Jakis house" or reredorter, but it was most likely at the north end. The "Jakis house" was $22\frac{1}{2}$ feet long and 12 feet wide, and the entry to it $16\frac{1}{2}$ feet long and $13\frac{1}{2}$ feet wide.

The dorter stood upon a vaulted undercroft with a central row of columns, extending northward for eight bays from the south-east angle of the cloister. This sub-vault was divided by partition walls into at least four apartments.

The northernmost was most likely a cellar or store place. It was entered from the cloister by the doorway in the first bay of the east alley, and was three bays long. The vault, which was quadripartite with moulded ribs, was carried by the central row of columns and by clustered shafts against the walls (Plate II. fig. 8). It had not any wall ribs.

The next two bays probably served as the *calefactorium* or warming-house, where a fire was provided in winter for the canons to warm themselves at. It was entered by a doorway in its south-west angle.

The fifth bay had a doorway from the cloister and also another on the east. It probably formed the *auditorium* or parlour, where such conversation might be carried on as was forbidden in the cloister. It also served as a passage to the infirmary and as a lobby to the remaining bays to the south, which were entered from it.

These bays were originally prolonged eastward to form one large apartment 47 feet long and $29\frac{1}{4}$ feet wide, which no doubt was the canons' chapter-house, but the eastern division was pulled down after the Suppression

and the arches opening into it walled up. These arches were of two orders carried by moulded piers, the section of which is shown in Plate II. fig. 9. The chapter-house had a stone bench against the walls, which was also extended along the west end of the lobby as far as the doorway there. Upon the bench stood the vaulting shafts, as in the north alley of the cloister. The absence of a western entrance into the chapter-house is most unusual, and the arrangement can only be compared with the somewhat similar one of the chapter-house of the canons of St. George's chapel in Windsor Castle, built in 1360, which stood north and south with the entrance at the north-west corner.

The eastern range abuts on the south against the canons' chapel, the next building mentioned in the Survey, which covered six of the bays of the south alley of the cloister. It was an aisleless parallelogram measuring $114\frac{1}{2}$ feet in length by $24\frac{1}{4}$ feet in width, with certainly one (Plate II. fig. 10) and probably two doorways from the cloister alley. The lower part of its south wall and part of the west wall remain above ground, and together with the base of the east front, are of the same fourteenth century work as the northern and eastern ranges of buildings,¹ but the north wall is much thicker than the others and evidently formed part of an older structure.

Of the arrangements of the chapel we have no evidence, but a curious projection and thickening at the north end of the east wall, and a setting back of the adjoining section of the north wall, may point to the position here of a staircase from the dormer, which would thus have a doorway at its foot into the cloister. From an existing springer in the south wall it is clear that there was a vaulted ante-chapel in the western end, probably to support a gallery where guests might attend the services. A doorway, which is still in use, opened into the ante-chapel from without on the south, and to the west of this was another doorway, or more likely window, now blocked. Above these is a pointed doorway which opened southwards from the gallery on to a building

¹ The plinths of the buildings are shown in section on Plate II. figs. 11 and 12.

outside, to be mentioned below. There seems also to have been a doorway into the ante-chapel in its north-west corner, but this was afterwards walled up.

After the chapel the Survey mentions the "olde dinyng chamber." This must refer to the fourteenth century building, which is still complete, attached to the chapel on the south-west. It is three stories high, and consists of (i) a basement $39\frac{1}{2}$ feet long and $19\frac{1}{2}$ feet wide,¹ vaulted in two bays with simple groining springing from carved corbels; (ii) a large chamber of the same dimensions on the first floor, lighted by a wide square-headed west window of five lights; and (iii) an upper story lighted by a two-light square-headed window, also in the west wall. A circular stair or vice, now blocked, in the south-west angle gave access from the basement to the upper floors, and in the north-west angle were the garderobes. All three stories are now subdivided by modern partitions into various apartments, but there can be little doubt that the large room on the first floor was the "olde dinyng chamber," with a cellar or servants' apartment below and sleeping accommodation above. The old roof was probably a nearly flat one covered with lead, as the dimensions given, $40\frac{1}{2}$ feet by 27 feet, are those between gable to gable and from side to side. The present roof is of high pitch, covered with slate. The two gables may have been built just after the suppression. The absence of original windows on the east is owing to the chapel being there.

On the east side of the block just described, and extending along the south wall of the chapel, are some traces of a late fifteenth or early sixteenth century gallery or ambulatory 12 feet wide, like an open cloister alley, vaulted in square bays with a lierne vault, the shafts and springers of which remain in the first bay. It must have had a flat roof, or one of very low pitch, since a doorway opened on to it from the chapel gallery. Its purpose and extent are alike doubtful.

Of the next four buildings mentioned in the Survey, viz. the "oulde haull," "ij Chambers caullid the haull side," the "haull staires," and the "old Kytchen," there

¹ This has in the east wall a late Tudor doorway with carved spandrels, but all its other openings are modern.

are no remains. The old hall, since it had stairs to it, probably stood upon a vaulted basement or cellar. It most likely formed the western range of buildings, and if the lines of the north wall of the chapel and of the north side of the cloister garth be produced westwards, a hall of the length given, 31 yards from gable to gable, would just fill the space. Its width was apparently the same as the eastern range.

The chambers called the "haull side," and the stairs, probably abutted against the west side of the hall, the former at the south end, the stairs at the north. The latter would thus open into the screens, whence there was an "entrye leading ffrom the oute parte of the haulle" to the "old kytchen," which probably stood semi-detached on the north. The dimensions of neither entry nor kitchen are given.

The western range of buildings stood on a higher level than the cloister, hence the steps in the north-west angle of the latter.

The north-west corner of the "olde dinyng chamber" block does not seem to have had any building against it, and the old hall must therefore have stood away from it as suggested on the plan. But against the eastern half of the block there was clearly a two-storied building. The lower story was vaulted,¹ and probably served as an entry into the cloister. The upper story formed the "littill Chapell ioyninge to the olde Dinyng chambre," next mentioned in the Survey, the roof dimensions of which exactly agree with those of a building fitted in here. The little chapel had probably west and north windows, and must have been entered from the old dining chamber which it adjoined, although there are now no signs of a doorway.

The next item in the Survey which concerns us is "the haull syde leades." There can be little doubt that this entry refers to the west side of the cloister, which adjoined the hall, and the length given, 27 yards, or 81 feet, is almost exactly that from the little chapel northwards to the north end of the hall, while the width, $5\frac{1}{2}$ yards, or $16\frac{1}{2}$ feet, is the extreme breadth of the cloister alley.

¹ One of the wall ribs of the vault may still be seen.

Both the hall and hall side ended northwards against the frater, which is the last of the claustral buildings mentioned in the list.

The usual place for the frater was against that side of the cloister which was remote from the church, and the dimensions given, a length of 35 yards and a breadth of $11\frac{1}{2}$ yards, enable us to assign it this position here. In most houses of canons the frater stood upon an undercroft, which served as cellarage, but in this instance the subvault was only half the width of the frater, which must, therefore, have extended southwards over the north alley of the cloister. The thinness of the cloister wall on this side is thus accounted for, since it had merely to help to support the frater floor.

The frater was no doubt reached by a continuation of the steps in the north-west angle of the cloister. Its total length was $111\frac{1}{2}$ feet, and its breadth $28\frac{3}{4}$ feet, but the westernmost bay would be cut off to form the screens, leaving seven bays clear to form the frater proper; its position over the cloister enabled it to be well lighted from both sides.

According to the Statutes, the food served in the canons' frater was cooked in the nuns' kitchen and passed through the turn in the window-house. As this kitchen at Watton was 350 feet away from the frater, it is difficult to see how the dishes were kept hot during such a journey, especially with the additional delay midway while they were being passed through the turning window. It is, therefore, not surprising to find, as we do from the Survey, that the canons had a kitchen of their own, which no doubt served the frater as well as the old hall. Its possible position is indicated on the plan.

Of the last of the buildings mentioned in the Survey which have not been noticed, the "lytill garner in the yarde," we know nothing beyond the dimensions of its roof, 54 feet by 21 feet. It was perhaps placed to close in the west side of a yard next the old hall, and so helped to shut out the view of the nuns' cloister.

It has now been shown that the Survey includes all the buildings round the cloister, but it makes no mention of the east and south alleys, probably because they were

roofed with tile or slate instead of lead, nor of the remainder of the existing house upon the site.

This may now be described.

The house in question consists of three blocks : (i) that on the north already noticed under the name of the "olde dinyng chamber;" (ii) a smaller and later block to the south; and (iii) a larger and still later block on the west.

The smaller block is a three-storied *camera* of the fifteenth century, standing east and west against the south wall of the fourteenth century block. The windows have been modernised and the interior subdivided, but there is little difficulty in making out its arrangements. On the ground floor was a room 27 feet long and $15\frac{1}{2}$ feet wide, with a fireplace in the south wall, which also contained one or more windows.¹ The east wall had a small loop in its north end, but was for the most overlapped externally by a half-octagon projection which contained a stair to the first floor; this projection was also continued southwards to contain a garderobe shaft from the upper chamber. On the first floor was a room of the same size as that below, but in later times the west end was probably partitioned off, as now, to allow of communication between the three divisions of the house; it had a garderobe in the south-east corner and was lighted by square-headed windows in the south wall. The third story seems to be of later date, and was perhaps added when the western block was built. The present high-pitched roof is covered with slate.

The western wing, unlike the others, which are for the most part of ashlar, is built throughout of brick with stone dressings. It now consists of a three-storied block, standing north and south, with large octagonal turrets at the western angles and a lesser turret at the south-east corner containing the staircase. Projecting from the west front towards its northern end is a handsome two-storied oriel.

The house had formerly a wing at the south end, also of three stories, projecting from it westwards just north

¹ The present windows are modern.

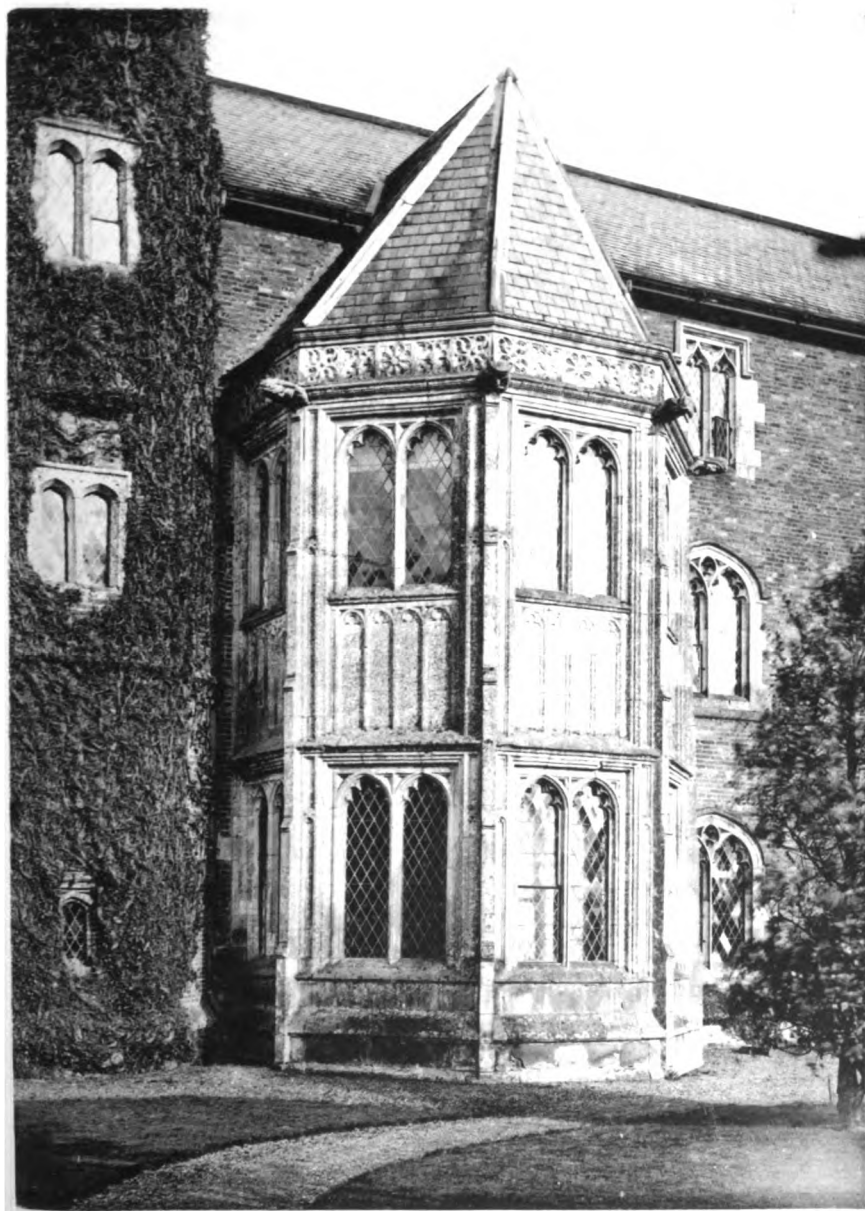
of the turret,¹ but it was taken down about 1840, and all traces of the junction carefully effaced.

The ground floor and the first story of the existing block were identical in plan. Each consisted of a hall 52½ feet long and 19¾ feet wide, with a panelled arch opening into the oriel. In the middle of the east wall was a fireplace, and in the south-east angle was a doorway into the vice, which extends from the ground floor to the roof. The other turrets had small chambers on each floor. The south-west turret probably contained the garderobes. The turret windows are original, but the others are modern, and it is doubtful how far they represent the older ones. The oriel was ceiled and not vaulted. The third story is a huge attic, amply lighted by large and original five-light windows at each end, and probably served as a dormitory. Externally this western block is greatly overgrown with ivy, which of course obscures many interesting architectural features, but it is fortunately kept clear of the oriel. This is one of the finest examples of its kind in the country (Plate VI.). It is semi-octagonal in plan, with a moulded plinth, and has in each side two two-light square-headed windows, one above the other, separated by a band of panelled ashlar. On the angles are slender buttresses of five stages. These end under a parapet, enriched by a continuous series of traceried panels. The effect of the whole, which is in perfect preservation, is enhanced by the carved figures projecting as gargoyles below the parapet on the four free angles. The present roof is a pyramidal one covered with green slate.

There can be little doubt that the existing house formed the prior's *camera* or lodging. In the fourteenth century it consisted of the northern block only, but in the next century this was enlarged by the southern block. About the end of the fifteenth century the western block was added.

It will be noticed that the Survey mentions the "oulde haull," the "olde dinyng chamber," and the "old kytchen," but says nothing about a new hall, etc. If such existed, as we may certainly assume they did,

¹ See the engraving in G. Oliver, *Town and Minister of Beverley in the County of York* (Beverley, 1829), 529.



WATTON PRIORY—ORIEL OF THE PRIOR'S LODGING.

these must have formed part of some building of more recent date which was not one of those deemed to be superfluous. The western block of the existing house is exactly such a building as meets these requirements. The ground floor formed the "new hall," the hall above it "the new dining chamber," while the "new kitchen" and its appendages formed the ground story of the destroyed west wing. This opened directly into the screens at the south end of the hall, whence the stair in the south-east corner enabled the service to be readily extended when necessary to the dining chamber above.

As the accommodation afforded by the three blocks forming the prior's lodging must have been somewhat in excess of what was needed by himself and his household, it may be concluded that he also lodged here, as was usual, persons of quality who were the guests of the monastery. The ordinary guests of the middle class would of course be housed by the cellarer in the old hall and the chambers forming the "hall side."

The canons' infirmary has yet to be sought for, either eastwards of their cloister, which is the more likely place, and where there is plenty of room for it, or south of their chapel.

One other point on which light is wanted is the way by which the canons went from their cloister to the great church, where their quire was in the south aisle. If the "hall side" stood where suggested in the plan the canons might have left the cloister by the entry under the little chapel, and traversed a pentise extending along the hall end and "hall side" and thence to the south-east angle of the church and round to a doorway in the south wall. We have of course no evidence of this course, but it is not easy to suggest a simple alternative, and in view of the fondness for pentises in religious houses it may have been that actually adopted. The space between such a pentise and the nuns' cemetery wall would serve for the canons' cemetery.

The Survey makes no mention of any building that could have been used by the *conversi*, and there is no accommodation for them in the canons' cloister. Possibly

by the time the latter was rebuilt the *conversi*, as among the Cistercians, had given place to hired servants who for the most part lived at the granges. If any such were lodged in the priory their quarters have yet to be found.

The outer court of the priory must have been on the north, and the entrance to it on the west where the lane now called the Avenue abuts on the precinct. There are no remains of the gatehouse nor of any of the buildings, such as the stables, bakehouse, brewhouse, etc. that usually stood in the outer court. The only building now on the site is a long range of stabling, etc. standing east and west, to the north of the present house, and known locally as the Nunnery. It is a picturesque two-storied structure with four-centred doorways and square-headed windows, built entirely of brick and roofed with tile, but is apparently of a date subsequent to the suppression of the priory.

The north side of the outer court is bounded by a running stream, which rises somewhere to the north-west, and also furnished a branch that once formed the western boundary of the precinct. After traversing the north side it bends southwards at a right angle and passes under the building described above through a wide archway. It reappears a few yards south of this, but after skirting the base of an old wall for about 130 feet it is covered over and runs through a stone tunnel beneath the canons' buildings, finally emerging from under the south end of the present house. It thence continues southwards and discharges into another stream which bounds the precinct on the south along Church Lane.

Previous to the building of the western block of the prior's lodging the stream was open there, and spanned by a bridge. This was not destroyed when the block was added, but the parapets were removed and the bridge utilised as part of the tunnel. It measures 10 feet across, with a span of 11 feet, and is ribbed beneath in a manner characteristic of the fourteenth century, to which period it belongs.

The fate of the priory buildings at the Suppression is not easy to make out. It is clear from a letter addressed to Cromwell on 18th March, 1539-40, by

Robert Holgate, bishop of Llandaff, who held the priory *in commendam*, and surrendered it in December, 1539, that he had applied for a grant of it to him for life.¹ The result was the issue of letters patent, dated 16th July, 32 Henry VIII. (1540), granting to Robert, bishop of Llandaff and lord president of the Council of the North, "totum illud nuper Monasterium sive Prioratum nostrum de Watton in Comitatu nostro Ebor. Ac etiam totum dictum scitum fundum circuitum et precinctum ac ecclesiam ejusdem nuper Monasterii sive Prioratus," together with divers manors and other properties. But "omnia et singula debita Catalla bona mobilia et immobilia dicto nuper Monasterio sive Prioratui de Watton predicto tempore dissolutionis ejusdem spectantia sive pertinentia tam ea que predictus Episcopus nuper Commendatorius et ejusdem loci Conventus adtunc possidebant quam ea que obligacione vel alia quacumque de causa ipsis vel dicto Monasterio sive Prioratui quoquomodo debebantur ornamentis jocalibus et vasis argenteis ad dicta officia psallendis cultumque divinum in ecclesia principali sive majori de Watton predicta vocata *the Nunnes Church* infra idem nuper Monasterium destinatis occupatis seu positis necnon omnibus edificijs tectis plumbo et Campanis ejusdem ecclesie principalis et aliorum edificiorum infra circuitum et precinctum Monasterii ibidem nobis semper et omnino salvis et reservatis."²

It will be seen that this grant makes over the precinct and the church, probably the canons' chapel, to Holgate, but reserves to the king all the jewels and ornaments used in the principal or greater church, called the nuns' church, as well as all buildings covered with lead and the bells of the principal church and whatever others there were.

Surveys were no doubt thereupon made of what buildings were covered with lead, and considered superfluous. That which dealt with the nuns' church and the buildings attached to it is lost, but the Survey of the

¹ *Letters and Papers, Foreign and Domestic, of the Reign of Henry VIII.* xv. No. 362, p. 143.

² Public Record Office. Augmentation Office Book 235, ff. 13, 14.

canons' court has survived, and the above cited grant enables it to be approximately dated.

The buildings forming the prior's lodging, although in part covered with lead, were evidently spared as being a convenient mansion to live in, while the remainder were dismantled and eventually demolished.

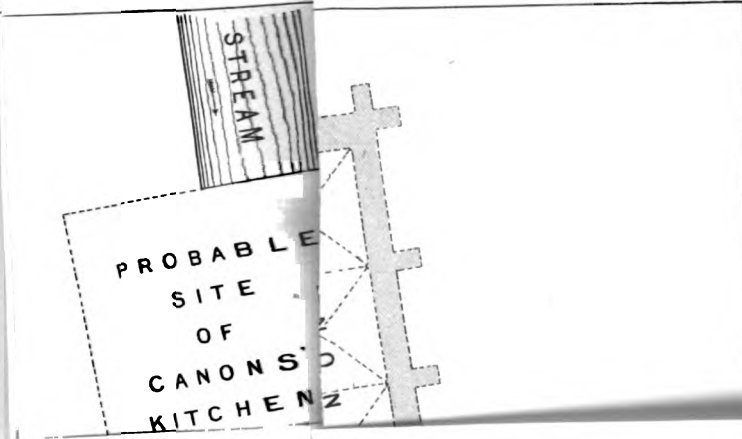
Holgate was advanced to the archiepiscopal see of York in 1545, but deprived early in 1554, and in the following year he died. The priory of Watton seems, however, to have reverted to the Crown some time before, for in 3 Edward VI. (1549), an exchange was effected between the king and John (Dudley) earl of Warwick, by which the latter received *inter alia* "Firma Scitus sive capitalis mancionis dicti nuper Prioratus [de Watton] cum omnibus terris pratis pascuis et pasturis dominicalibus eidem prioratui pertinentibus sive expectantibus nuper in Manibus et occupacione nuper Prioris et Conventus ibidem die dissolucionis ejusdem nuper Prioratus per annum xlij. li."¹

This grant was confirmed to John Dudley, as earl of Northumberland, in 7 Edward VI. (1553), in identical terms.² After his beheading the same year Watton again reverted to the Crown on the forfeiture of all his honours and estates. Its further history does not fall within the scope of this paper.

In conclusion, I must express my thanks to Mr. William Bethell, the owner, and the late Mr. Richard Beckitt and Mrs. Beckitt for many kindnesses during the progress of excavations, and to Mr. William Stephenson, of Beverley, and Mr. John Bilson, F.S.A., for much kind help. I have to thank Mr. Harold Brakspear, F.S.A., who was my companion in 1898, for the plate of architectural details, for the use of the photographs reproduced as illustrations, and for drawing the plan of the remains of the canons' cloister. For the rest of the ground plan I am myself responsible.

¹ P. R. O. Particulars for Grants 3 Edward VI. Augmentation Office, File 2,046.

² *Ibid.* 7 Edward VI. File 1821.



AMBER.

By PROFESSOR T. M'KENNY HUGHES, M.A., F.R.S., F.S.A., F.G.S.

There are few natural objects that can compare with amber for beauty, for historic associations, and for scientific interest. There are not many things so restfully responsive, so peacefully brilliant, as a collection of polished amber gleaming in the sun, here gathering its light into glowing centres, here reflecting it from small surfaces within, or there transmitting it on to surrounding objects.

The difficulties that hung round its mode of occurrence and the obscurity that enveloped the country where it was found; the fabulous accounts of its origin, and the superstitious beliefs in its virtues; its known electric properties, and the remains of what were once living creatures so strangely enclosed within it—all united to throw a mystery and an additional charm around this beautiful substance.

We can understand why a Roman lady would love to carry a piece of amber about with her to play with. Men throughout eastern Europe now carry a small string of beads, often made of amber, to fiddle with, and, as some have assured me, to assist them in resisting the excessive longing for smoke, which, like sipping sherry or breaking up one's bread at dinner, often originates in the desire to be employed on some mechanical task from a feeling of unrest or fidgets.

The Roman lady, wishing for an excuse to avert her eyes, may have looked down at the play of light in the beautiful object she carried in her hand, may have changed the subject by calling attention to it, and in many ways have found it useful. She cannot have carried it about as scent, for it gives off none at ordinary temperatures, though it forms an important ingredient in incense burning, as, for instance, before the shrine of Mahomét at Mecca, and in the temples of China, where

large quantities of it are consumed. She may have liked the velvety feel of the amber, but it is curious, when one comes to think of it, how few things there are, except articles of dress, that are ever carried about to please the sense of touch, as compared with the number that are kept about one for the gratification of the other senses. In the hot summer of Italy she would perhaps have received more pleasure from the cool relief of holding a piece of rock crystal or carnelian in her hand.

The ancients regarded with interest the strange inclusion of what once were living things in this transparent substance, and attached great value to good specimens of amber with insects in it. But their mythology shows that the derivation of amber from the resin of trees was understood and also its common occurrence in the alluvial deposits of certain rivers. Milton embodies this legend in the lines that tell—

“Of the half parched Eridanus, where weep
Even now the sister trees their amber tears
O'er Phaëthon untimely dead.”

But Pope expressed the popular view when he wrote—

“Pretty! in amber to observe the forms
Of hairs or straws, or dirt, or grub, or worms!
The things we know are neither rich nor rare,
But wonder how the devil they got there!”

Bacon¹ more thoughtfully had written, “The Spider Flye and Ant being tender, dissippable substances, falling into Amber are therein buried, finding therein both a Death and Tombe, preserving them better from Corruption than a Royall Monument.”

Lizards are sometimes seen in amber. In the Bath Museum many years ago there was, and there is now in the South Kensington Museum, a piece containing a fish. It is easy to see how the exuding resin, to which insects would so easily stick, would flow round them and the leaves and twigs of the trees. And it is of course possible that the resin may have dropped on to and enveloped a dead fish thrown up at the base of the tree.

¹ *The History of Life and Death*, 283.

Various analyses of amber have been given. According to Schrötter it consists of—

Carbon	..	..	..	78·94
Hydrogen	..	..	..	10·53
Oxygen	..	..	..	10·53
				<hr/>
				100·00

As the result of another analysis its composition was found to be—

Carbon	..	..	..	80·99
Hydrogen	..	..	..	7·31
Oxygen	..	..	..	6·73
Calcium	..	..	..	1·54
Alumina	..	..	..	1·10
Silica ..	..	..	..	0·63
				<hr/>
				98·30

At 287° it melts and is decomposed, yielding water, an organic oil, and succinic acid. By cooking it for forty hours in an iron vessel covered with sand or boiling it for twenty hours in rape oil, amber will become transparent and pieces can be moulded and stuck together. By boiling in turpentine pieces of amber can be softened so that they can be kneaded together or moulded into any form. By mixing equal parts of turpentine and rectified spirit of asphalt and boiling slowly until the mixture becomes thick a kind of amber may be produced. The clouded light yellow mouthpieces for pipes are nearly all made from a composition prepared in some such manner, and known in the trade as amberoid.

This makes us a little suspicious of queer and exceptional specimens and has given rise to the suggestion that the ancients had some method of making it plastic and to a certain extent, at any rate, soluble, because the size of the vessels recorded seems to be so much greater than they could turn or cut out in any way from the pieces of amber likely to have been available.

It may be, however, that some of the pieces which are recorded to have been found were large enough to have

yielded any of the vessels referred to. In the great store brought back to Rome in the time of Nero, there was one lump weighing thirteen pounds, and others are on record weighing eleven pounds, eighteen pounds, or even twenty-two pounds.

One large amber bowl found in a tumulus in Ireland suggests many thoughts. Ireland was from very early times within easy reach of Baltic and North Sea traffic, and amber was an article of value and therefore of barter among the ancient Britons. Was this bowl then carved out of a solid lump of amber, or were the Irish of that age acquainted with the not very complicated appliances required for reducing amber to a plastic state, or is it a made-up thing imported by merchants from the Far East, and exchanged perhaps for Irish gold?

Objects carved in amber have always been much valued. The material is soft and requires care and delicate manipulation, but when finished it is very beautiful from the play of light and colour in it. Mounted with a foil at the back, it can be made to resemble most of the precious stones which have a red or yellow tint. Pliny records especially how well amethyst can be imitated in amber.

Some think that light is thrown upon the origin of the diamond by the constitution and mode of occurrence of amber, giving as a series amber, jet, anthracite, carbonado, diamond.

There is considerable range of colour in amber, as may be seen in the collection which I exhibit this evening,¹ but the colours may be grouped under a very few heads. There is the opaque, light-yellow, or straw-coloured variety, known as "fat amber" from its resemblance to the fat of beef. This is sought after for mouth-pieces for pipes. There is a honey-coloured transparent variety; another like dark sherry, which is the one referred to when we speak of "amber" as a colour, as in "amber ale." This was probably the colour of the old Falernian wine which was compared to amber and may be the chryselectron of Callistratus. Another we may compare to treacle or golden syrup. Then we have the

less common ruby-coloured amber with its still more rare variety which has a blue tint pervading it, like the bloom on a plum.

Amber has long been regarded as one of the most important articles of commerce for the purpose of tracing trade routes. It was thought that practically it might be considered an almost exclusively Baltic product, and indeed that is very nearly true at the present time. There is not much brought into the market from any other source.

The earliest historical notices point to the Baltic as the source of amber. From an Assyrian inscription of the tenth century B.C. it has been inferred that Asiatic caravans following the river valleys crossed Russia in Europe to seek for amber. The merchants of the Eastern monarch gathered it, they said, on the shores of "the seas where the Lesser Bear is in the Zenith," so that they could no longer shape their course by it.

If we may accept the interpretation of this inscription given by Oppert,¹ it pretty well settles the question as to whether the electron of Homer was really amber or an alloy of four parts gold to one of silver. These Asiatics visited the Baltic before the time of Homer and before the Milesians and the travellers of whom Herodotus speaks, and they certainly did not go there for gold and silver.

It is dug out of a bed full of decayed trees which occurs along the eastern shores of the Baltic from Memel to Dantzig, among strata of sand and gravel now referred to the Oligocene. It is supposed that similar beds occur within reach of the waves somewhere along the coast, as large quantities of amber are thrown up on the shore after storm. The forest must have grown over part of the area which is now covered by the Baltic Sea and have extended through Lithuania and Pomerania into Poland and Moravia.

Owing to its small specific gravity it is easily carried by currents over a shallow sea bottom or along the shore, and it is accordingly found not only on the South Baltic Coast, but also along the shores of Sweden, Nor-

¹ Oppert, Professor J., *L'Ambr* *Journal Officiel de la République Française* chez les Assyriens. Delaunay's *çaise. Revue Historique*, 1881, p. 1862.

way, and Denmark. Professor Heer discovered it in Heligoland. It is dredged up in the North Sea, and occasionally picked up on its shores, but to what conditions and what age its occurrence in this area may be referred is not so clear. There may be, or may have been, some nearer source of supply, or its transport may belong to the period when the Baltic had more open access to the North Sea.

The frequent mention of Ligurian amber was thought to indicate that it was obtained along the Riviera. But no source of supply has been found in that region, and this difficulty was got over by the suggestion that there was some port of export and import in the Gulf of Genoa from which the amber was spoken of as Ligurian. This was not, however, quite satisfactory, as the distinctive title implied some difference in the quality of the substance obtained from Liguria, which perhaps was not amber at all.

Then it was observed, that amber had for ages been gathered from the alluvial deposits in the basin of the Simeto and of the Salso, washed down, of course, from the Tertiary deposits that lap round the flanks of Etna. It is carried by these rivers, and by the Giovietta, out to sea, and then washed up along the coast near Catania and Licata and the ruins of the ancient Morgantium. It has been found in a brownish grey porous sandstone mixed with lignite at Calascibetta and at Castrogiovanni.¹ This is probably a decomposed calcareous rock of Tertiary age. It has been suggested that Sakal, the name used by the Egyptians for amber,² was only a mispronunciation of Sikel, the people or land from which they brought it home.

But the conditions were very different in the two regions. The amber procured from the Baltic was found in the partly submerged débris of an ancient forest or washed out from that into the sea, whereas in Sicily it was found in the alluvial deposits of the Simeto, or recently thrown up on the shores near the estuaries. The Sicilian amber was generally much darker than that from the Baltic, and it was in Sicily only, as was

¹ Buffum, pp. 13, 21.

² Pliny, *Nat. Hist.*, xxxvii, 2, 36.

then supposed, that the red-tinted amber was found. It was therefore thought to be still quite a safe inference that trade with the Baltic was proved by the occurrence of any of the pale ambers in the Mediterranean region.

It is a very curious fact that Diodorus Siculus, who was born on a part of the island which has since his time yielded large quantities of amber, should make no mention of its being found in Sicily; he says it is found only on the shores of the island of Basilia beyond Gallia, opposite Scythia.

Perhaps the island of Basilia meant the promontory of Samland, or may have included the strips of low ground which run from near Königsberg north to Memel, and south almost to Dantzic, and which, with the Kurische Haff and the Frische Haff behind them, would probably be taken for an island lying off the coast of the ancient Scythia. An island in the mouth of the Neva at St. Petersburg is now known as Wasiliev. Indeed, Basil or Vasil is so common a name in Russia that one is inclined to speculate upon the possibility of its being an old Scythian place name perpetuated by its fitting into royal names of later date and different origin. There is no difficulty in the statement that Basilia was *beyond* Gaul, because the trade route from the Western Mediterranean was through Gaul, as, to a traveller by the long sea route, India is *beyond* the Cape of Good Hope.

Amber is found not only in the Baltic and in Sicily, but in many other places, though not often in workable quantities—in the Adriatic, for instance; in Switzerland near Basle; in France, in the Departments of Aisne, Loire, Gard, and Bas Rhin. In Italy it used to be found in the basin of the Po. Amber of somewhat the same character as that of Sicily is said to have been found in Roumania and on the Lower Danube. It occurs in the London clay near London, in the Cambridge greensand near Cambridge, in the brown coal of Alsace and Austria.

Dana records its having been found in the greensand of the United States, generally in lignite or marl, or washed into more recent soils. He mentions the localities Gay Head or Mather's Vineyard near Trenton,

Camden in New Jersey, and Cape Sable near Magothly River in Maryland; on Judith River in Montana and at Harrisonville in New Jersey. It has been found on Lebanon, and is recorded from Syria, India, and Madagascar. But there is some doubt about some of the localities from which amber is said to have been procured, as it is not always easy to distinguish the true fossil resin from some of the more recent gums which closely resemble it, while in some of the old descriptions it is evidently confounded with other substances—ambergris, for instance.

North Burmah yields considerable quantities to the markets of the East, especially to China, and Armenian merchants distribute it, from whatever source it can be obtained by them, through Egypt, Persia, China, and Japan, in all which countries the demand is greater than the local supply. It occurs along the north coast of Siberia, as far as Kamschatka, and Professor Heer has found small grains of it in the coal-beds of Greenland, where he thinks it may be a product of the sequoia which grew there in early Tertiary times.

Professor Milne¹ records that in some of the Tertiary beds of North Nipon lumps of amber up to a foot in diameter are found. Some are cracked and opaque, while others are transparent and free from flaws, and many contain remains of insects. He does not, however, mention whether there is any evidence that this has at any time been an important source of the amber of commerce.

This wide distribution shows that there must always be some doubt as to the origin of any isolated specimens found among ancient works of art, unless we can make out some distinctive features of constant occurrence and permanent character between the specimens obtained in the several different localities.

In an interesting series of articles on amber, Professor Conwentz maintains that the amber of these various countries, or some of them, can be distinguished by the proportion of succinic acid they contain and suggests distinctive names. Succinite, from the Latin name, he

¹ *Catalogue of the Minerals, etc., in the Geol. Depart. of the Impl. Coll. of Engineering, Tokio, 1880, p. 71.*

assigns to the Baltic amber ; Simeite to that from the Simeto ; and Burmite to that from Burmah.

Even if we could feel sure of the results of the analysis of such small quantities and small number of examples, there does not seem to be any advantage to be gained by multiplying names for varieties of a common substance, when so little is known as to the differences which are due to the varieties of tree from which the resin was derived, to the differences of age and climate, and, more than all, to the differences of texture and composition which are superinduced by the mode of preservation of the specimen.

Moreover, succinite, one of the names suggested, had been already used by Berzelius in another sense, namely, for one of the constituents of amber which is insoluble in alcohol, but which in combination with small proportions of two other resins, isomeric with succinite, but soluble in alcohol and ether, goes to make up common amber.

With a view to making out whether there are any marked characters belonging to either, by which the origin of isolated pieces could be determined with any confidence, I have been collecting evidence from the North Sea and from Sicily. For some of my Catanian specimens I am indebted to my friend the Marchese di Gregorio. But I have procured the ruby-coloured amber from the North Sea and all the paler varieties from Sicily. In the North Sea the honey and sherry-coloured amber is by far the most common, and ruby-coloured specimens are exceedingly rare. In the Catanian amber, on the other hand, the darker tints prevail, and a large proportion of the amber beads worn by the peasantry of Sicily are of a syrup or ruby or plum-bloom colour.

In illustration of this point I exhibited at a soirée of the Royal Society a small collection containing ruby, syrup, sherry, and honey-coloured amber both from the North Sea and from Sicily. If the chemical composition follows these two markedly different colours, the ruby and the yellow, then we must give up the identification of Baltic and Catanian amber by that test.

The quantity of really ancient amber objects, about which this question could be raised, is so exceedingly small that there might be anywhere a dark red bit from

the North Sea brought in the course of trading operations to the Mediterranean or *vice versâ*, but the chances are against it. No precaution on the part of collectors could guard against an accident of that sort, save rejecting all specimens not procured directly from the amber-bearing stratum. My specimens were purchased with a number of others, sold by weight or in a lot, no attention being drawn to any difference of colour, and no additional value being attached to the darker varieties in the case of those found on the shore or dredged up in the North Sea, or to any of the variously coloured specimens in the case of those procured from Sicily.

Taking such evidence for what it is worth, it shows that colour, which is the most obvious and constant character by which the varieties of amber may be distinguished, is not a sure test of the district from which amber has been derived, as I have procured all the varieties both from Sicily and from the North Sea. Some of this difference of colour may have existed in the original resin, owing to the different species of tree from which it was derived or some difference in the conditions of exudation. Anyone who has collected gum from conifers and from cherry trees will know that there is some variety in the shades procured from the fir trees, but that most of it is of a light colour, whereas there is a greater variety in that which is obtained from cherry trees, and much of it is of a darker colour than the average of that from the firs.

There was a great variety of trees in the ancient Baltic woodland which bore a considerable resemblance to the North American forests of to-day in the general character of its flora. Goepfert has determined no fewer than one hundred and sixty-three species among the plants found in amber. Nearly a hundred species of trees and shrubs are recorded from it. He distinguished thirty species of pine, to which Menge has added one more. There were also yews, junipers and cypresses, oak, willow, poplar, birch, and beech and alder and the camphor tree; also ferns, mosses, funguses, and liverworts. There is likely to have been some original difference in the resin exuded, seeing that there was such a variety of trees, as is proved by the fragments of twig and leaf which

were blown on to its sticky surface or on to which it dropped.

Flaws in amber do not always detract from its charm. On the contrary, in many cases the light reflected from the surface of the flaw, as sometimes from the "feather" in quartz, adds greatly to the brilliancy of the specimen and throws back iridescent flashes of great beauty. When these flaws are numerous, small flakes appear glistening throughout the transparent body of the amber and produce somewhat the effect of *avanturine*. Sometimes when larger they have been mistaken for fish scales.

But when the surface of the amber is exposed to strong vicissitudes of temperature, as when the sun is allowed to shine full on the case where it is displayed, heating it up when it passes across and allowing it to cool as suddenly when it disappears, the exterior of the amber by the rapid expansion and contraction becomes covered all over with very minute cracks, and if this process is allowed to go on long enough it becomes opaque. In all amber that has been exposed to what is called weathering of the exterior, whether above ground or in the soil, this is the condition of the surface. It is covered all over with minute flaws which have all to be ground away before the specimen can be polished. It is not clear what the exact process is by which this result is arrived at in so many different circumstances, but it is evident that when this condition of surface has been produced, the specimen must be much more susceptible of chemical changes affecting the colour and proportion of succinic acid.

When, however, we have regard to the very different conditions under which the amber has been preserved in the two areas, there is room for suspicion that the mode of preservation may have much to do with its different character. I have some pieces of amber found in an Etruscan tomb at Monte Ottone, in the province of Marche, associated with objects in bronze and iron, one piece of the amber having an iron pin passing through it with traces of a bronze mount at one end. This amber is all of a dark syrup colour with a tinge of ruby here and there in the larger fragments. The character and distribution of the colour in relation to the exposed

surfaces suggests in this case that it has been superinduced since the fashioning of the ornament into its present form.

I have also some amber beads from a Saxon grave near Mildenhall, in which the same colours and relation of tints may be observed. In this case the presumption is very strong that it is an example of yellow North Sea or Baltic amber changed to a rusty red colour, with sometimes a more rosy tint within, by the conditions to which it has been subjected since it was fashioned into ornaments. These beads were buried round the neck of the dead body, and they have therefore been exposed in an exceptional manner to the action of organic acids.

There is therefore much to suggest that this oxidated hydrocarbon may be changed in time under the influence of hydrating or oxidizing agents, and that the chemical composition and colour may be thus affected.

This has been inferred from the condition of the surface of amber objects found in graves the dates of which can be approximately ascertained.¹

More conclusive evidence that this darker colour is due to a superinduced change in the condition of the amber is offered by a specimen in my possession which has a uniform dull ruby tint to a small depth, while the interior is still of what we may infer was the original light yellow colour.

There was probably the same range of colour in amber as is found in the gum of various trees to-day; but however that may be, it is certain that changes in the condition of amber have been produced by its mode of preservation, which have in many cases caused it to become darker in colour; and therefore colour is not a sufficient test for the discrimination of the sources from which pieces of amber have been obtained; nor can the chemical analysis of small fragments or of a small number of examples of pieces of amber be relied upon to enable us to determine the region from which isolated specimens have originally been derived.

¹ Cf. Buffum. *The Tears of the Heliades, or Amber as a Gem*. London Sampson Low, 1896.

ON RECENTLY DISCOVERED MURAL PAINTINGS IN OUR ENGLISH CHURCHES.

By C. E. KEYSER, M.A., F.S.A.

In February and May, 1896, I read a paper before this Society on the subject of the recent discoveries of mural paintings in our churches and other ancient buildings which had been brought to light, or to my notice, since the publication of the South Kensington List in 1883.¹ I now propose to continue the report up to the present time, as although only a short time has elapsed since the publication of my last paper, a certain number of interesting finds have been noted, which may well be collected, so as to form a short but comprehensive treatise of our subject up to date. I only wish I could produce some illustrations, but my attempts to have some of the series photographed have not turned out very successful, and I have not thought it worth while to make any further effort in this direction.

Starting from the eastern counties, I must first mention some paintings recently discovered at Norwich Cathedral, chiefly in the south aisle, which have been duly described by Mr. W. H. St. John Hope, and an account of them published in the *Proceedings of the Society of Antiquaries*, XVII. 308. At Ranworth Church, Norfolk, which is now undergoing restoration, is a decorative border, and traces of paintings are discernible beneath the whitewash on the nave walls, which will, I hope, be explored, when the new roof has been placed in position. At Carleton Rode, in the same county, visited in 1897, are numerous consecration crosses, which have been repainted. The chancel screen, simply referred to as "painted" in the List, has figures of St. Paul and the eleven Apostles, omitting St. Matthew, all well and boldly depicted on the panels.

At Tacolneston close by is, on the north wall of the

¹ See *Archæological Journal*, LIII. (2nd Series III.) 108, 160-191, 192.

chancel, a very beautiful consecration cross, with a white rim, a sort of olive green ground, and chocolate-coloured lines forming the arms. The lower portion of the screen, now standing against the chancel wall, has been preserved. Only two of the panels have been painted, but the colouring is so fresh and brilliant that it suggests the idea that the work must have been stopped by the advent of the Reformation. The mouldings of the panels have been painted ivory white, with flowers and foliage in red and green, quite equal in their execution to the magnificent examples at Ranworth and Attleborough. The panels have been decorated with gilding and gesso work, and there has been a subject on each which has been intentionally injured. On the one panel is an outdoor scene with trees, half a cell, a kneeling figure of a monk in black with hand on a book, while a richly vested female holding a box stands over him. On the next panel adjoining the former doors is a scarlet bed, two windows, etc. a kneeling figure in black, another figure richly robed standing over, and perhaps an animal, possibly a lion, at his or her feet. The painting is very good, but the faces have been wilfully scratched over. It is rare to find subjects like these painted on the panels of the Norfolk screens, and it is uncertain to what these refer, though it has been suggested that they are intended to represent the temptation and death of St. Anthony.

In this same year (1897) I was asked by the Council of the Society of Antiquaries to go down to Dovercourt, in Essex, and see whether any discoveries of importance had been made there. Accordingly I paid a visit to the church in October, and found the work of restoration still going on. The walls were in a very bad condition, but traces of texts, etc. were everywhere apparent. At the east end of the nave on the north side is the Lord's Prayer twice in red and black letter with rich crimson border, perhaps of the periods of Edward VI. and Queen Elizabeth. There are traces of vermilion colouring belonging to an earlier series. Between the window and north doorway are the Commandments of Elizabethan date, and part of an earlier subject, apparently our Lord with cruciform nimbus, holding some object with

yellow waved lines in his left hand. On the south wall are traces of texts, and a nice decorative border in crimson is carried along above the wallplate and round the head of the window. Above the doorway is an ermine cap and feathers; on the plaster above it were the letters "Henri y IV." I believe that similar caps were afterwards found on other parts of the walls.

At St. Alban's Cathedral, on the east wall of the chapel enclosing the shrine of St. Alban, a small portraiture of an archbishop, corresponding with that of St. William of York on the same wall, has recently been brought to light. In July of last year my attention was drawn to some discoveries at Abbots Langley, in Hertfordshire, and accordingly, accompanied by my friend Mr. P. H. Newman, who is an expert in these matters, I paid an early visit to the church. The paintings are on the walls of the beautiful decorated chapel on the south side of the chancel. On the east wall, on the north side of the east window, was a large figure of a bishop, and a corresponding one on the south side was afterwards uncovered by Mr. Newman. On the south and west walls were a series of small subjects within square divisions separated by a bright vermilion border, which are thought to represent scenes in the earthly life of Christ. The date seems to be of the early part of the fourteenth century.

In 1897 I received information as to the finding of some paintings at Rampton and Kingston, in Cambridge-shire, and accordingly in September I was able to run down and inspect them. At Rampton on the north wall of the nave near the east end was a very large portraiture of St. Christopher. The whitewash had been very carelessly removed, and only the head and upper part of the saint, with the Infant Christ seated on his shoulder, could be clearly deciphered. Above is a pretty foliated pattern with bunches of berries. In the lower part of the painting, the St. Christopher, which probably dates from the fifteenth century, has been scraped away, and the operator has uncovered an earlier pattern of double lines enclosing trefoils in red, with a very bold scroll border of the thirteenth century. Traces of decoration occur on other parts of the walls,

round the chancel arch,* etc. Round the head and down the jambs of the north doorway is a pattern of dentils in red. An account of the paintings is to be found in the *East Anglian*, VII. (new series), 253-5.

At Kingston, visited on the same day, the church had been recently restored and several very interesting paintings brought to light, but all in a somewhat mutilated condition. Over the chancel arch on a red ground were traces of a large subject, probably the Doom. On the north wall of the north aisle between the two east windows is the familiar portraiture of St. Christopher, most of the upper part having been destroyed. In the next space westward, and partly over the west doorway, is a large representation of St. George and the Dragon. St. George is riding on a white horse, and his spear has pierced the neck of the prostrate dragon, which has the head and jaws of a crocodile. On the same north wall are traces of two other subjects not yet divested of the whitewash. On the west wall, partly concealed by the present lean-to roof, is a large and interesting example of the wheel of the seven deadly sins. In the upper part is a large wheel with yellow rim and spokes having an edging of red. There is a medallion in the centre, and traces of the representations of the sins between the spokes. On the upper side left are parts of a figure, probably a demon. Below, the subject is somewhat confused, but is, I think, intended for the jaws of Hell. A large demon on the left with horns, bat's wings, and tail is blowing a horn, and there seem to be at least four figures in the mouth of Hell, some apparently having been hauled in. The idea seems to be that the wheel is revolving, and that the sins, as they arrive at the bottom, are seized and hurled down into the depths of Hell.¹ These paintings are apparently of the fifteenth century.

In 1898 the restoration of Barby Church, Northamptonshire, near Rugby, was commenced, and I was asked by the rector to pay him a visit and give him some advice on the discoveries he had made. Accordingly, in June, when the restoration was still in progress, I went

¹ For list of the various examples of this subject, see *Archæological Journal*, XLIX. 343.

down in the hope that, as in the case of many of the other Northamptonshire churches, interesting specimens of mural paintings might be brought to light. In this I was somewhat disappointed. The church had been previously thoroughly churchwardenised, and the walls were in a rotten condition. The chancel arch has been coloured in red, and the voussoirs of the soffit have been painted alternately red and white with blotches of a deep red. There are texts of various dates on east wall of nave and in north aisle. On east wall of north aisle is a pattern of lilies, and the same design appears on two niches in the north wall. There are traces all along the north wall, and by the north door a gigantic foot, part of a bare leg, and several fish in the water, demonstrating the former existence of a large picture of St. Christopher. To the west of the doorway, and on south wall of south aisle, were further traces of colour, but nothing of interest has, it is believed, been since discovered.

In 1898 I was asked by the Society of Antiquaries to report upon some paintings which had been found at Stowell, in Gloucestershire, and accordingly in October of that year and in the following spring I visited the church, and collected the materials for a short paper, which was read before the Society and appears in Vol. XVII. p. 382, of their Proceedings. The little church was mainly built during the last quarter of the twelfth century, and the paintings chiefly belong to this date. The principal remains are on the north wall of the nave, opposite to the main entrance, but there is some evidence that the subject was continued along the west and south walls of the nave and the walls of the south transept, though here we have portions of later subjects mixed up with the earlier series. The main picture provides us with a very early representation of the Doom. In the centre, under a semi-circular headed arch, is a figure of our Lord seated and with both hands upraised. On either side have been three similar arches, within each of which are seated two of the Apostles. St. Peter occupies the position on the right, and St. Paul on the left of our Lord. There are traces of angels above, at the side, and below, and several nude figures, some collected in a sheet, no doubt portray the risen souls receiving the

blessing or curse from the lips of their Divine Judge. On the transept walls seem to be represented the punishments of the condemned, though not very distinct, and there are the remains of later paintings, the subjects of which are also uncertain. On the interior of the tympanum of the Norman south doorway is a scroll and foliage pattern in grey with some lettering of the fifteenth century.

The beautiful church of Bishops Cleeve, near Cheltenham, in this same county, has recently been undergoing restoration, and on the occasion of a visit to it last October, to renew my acquaintance with the magnificent late Norman work with which it abounds, several paintings were noted as having been recently brought to light. In the south transept is a blocked Norman south window, with considerable remains of decoration, a bold scroll in red, starting from a head in the centre of a pale grey colour, and alternate squares of red and grey round the head, and a masonry pattern of double red lines enclosing cinquefoils on the splays. On some steps in the sill of the window is a lozenge pattern in grey. All the colouring seems to be of thirteenth century date. In the east wall of the north transept is a semi-circular headed monumental recess, and at the back a rather indistinct painting of the Crucifixion. In the centre is our crucified Saviour, with the Blessed Virgin and St. John the Evangelist on either side. On the south is a figure of St. John the Baptist holding a medallion on which is represented the Agnus Dei, while on the north side is a royal personage crowned but not nimbed. Behind the figure of the Virgin, which is on the north side, is a small kneeling portraiture of the donor. The only colours now visible are deep red and vermillion, and the date seems to be of the latter part of the reign of Edward III. or the second half of the fourteenth century. On the north wall of the north aisle is part of an early text with red and yellow border, and the lower portion of a richly coloured representation of St. Christopher of fifteenth century date. There is some earlier colouring mixed up with this painting, and traces of texts, etc. on other parts of the north wall, which have not yet been explored.

In a beautiful chapel on the south side of the south aisle is the effigy of a lady with considerable remains of the original decoration. On the walls of the parvise over the south porch are several large subjects said to have been executed by a schoolmaster, who formerly officiated there. There is a battle scene with elephants, etc. a lion, tiger, skeleton, and portrait of the schoolmaster, all exhibiting considerable merit. They are stated to have been painted in 1817.

At the interesting abbey of Hailes, visited on the same day as Bishops Cleeve, I found most of the objects which had been discovered during the recent excavations had been locked up, but a series of six very large and most beautiful bosses from the Chapter House roof were still on view. These were of the thirteenth century. All have bold foliage sculptured on them, and bear strong traces of gilding and red, green, and blue colouring. On one is a representation of Samson slaying the lion. A figure with long garment and hair is standing over the lion and wrenching open its jaws with his hands. Both figures are painted red, and the sculpture is admirably rendered.

At Fairford, in the same county, on the piers of the tower arches of the well-known church are some paintings which do not seem to have been satisfactorily explained. On the north-east pier is a large figure of an ecclesiastic, with a hermit's cell above him, holding a crozier, and another can be discerned on the north-west pier. On the south-east pier is a representation of the Crucifixion with the Virgin and St. John, and in a hollow moulding on either side are the implements of the Passion, viz. a ladder, lance and reed, cup, the dice, etc. These date from the early part of the sixteenth century.

At Kelmscott Church, Oxfordshire, there are considerable remains of mural paintings, though more might, I think, still be uncovered. The arches of the north nave arcade of transitional Norman character have been decorated with red colouring. There is a bold scroll on the faces and soffits of the arches and a trellis pattern on the eastern respond. In the north transept have been a series of subjects under rounded trefoiled

arches with heads painted between the arches, which are coloured in red and yellow. The subjects on the west and north walls are not clear, but on the east is the martyrdom of St. John the Baptist, two of the scenes depicting the daughter of Herodias dancing, turning a somersault, before Herod, and the executioner with the head of the saint on a charger. The date seems to be late in the thirteenth century.

I have received information from the Rev. E. H. Goddard of the finding of some paintings at South Newington, in Oxfordshire, which I have not yet had an opportunity of inspecting. The following subjects are stated to be still visible. On the jamb of the east window of the north aisle is a portraiture of St. Margaret. On jambs of window in the north wall are the Virgin and Child and two kneeling donors, and probably the Annunciation with kneeling figure of donor and armorial shield below. Farther west is a large and somewhat confused subject, alleged to represent the martyrdom of St. Thomas of Canterbury.

At Maids Moreton Church in Buckinghamshire, during the recent restoration, two paintings were brought to light in the chancel. One on the south side on the back of the sedilia represents the Last Supper. It is somewhat fragmentary, but the table can be made out, and part of the figure of our Lord and His hand pushing the sop across to Judas, who has a bag in his hand. Traces of the other Apostles are also discernible. The colours used are grey, red, and brown. On the corresponding space on the north side of chancel is the Crucifixion, but the whitewash has been only partially removed, so that the lower part alone of the subject is visible. The paintings seem to be of the same date as the church, or about the year 1480. At Great Missenden Church, in the same county, visited in February of the present year, while still undergoing restoration, are considerable remains of decoration. Several niches have been very richly coloured, one large one in the north transept or chapel having a very beautiful pattern of pomegranates on the back, with the outline of the statue which once stood there clearly defined. It is doubtless very late and probably about the year 1500.

At Drayton Church, Berkshire, some portions of a very highly decorated reredos, formerly stowed away in the church chest, have again been brought to light, and are now placed in the sill of a window on the east side of the south transept. There are six subjects arranged from north to south in the following order: (i) The Assumption of the Virgin; (ii) the Annunciation; (iii) the Adoration of the Magi; (iv) the Betrayal; (v) the Scourging; and (vi) the Entombment, with the Marys at the Sepulchre. The date is probably early fifteenth century. At Kingston Lisle, in the same county, visited in 1896, are several paintings which have been described in the *Reliquary*, VI. new series, 143. The subjects are in the chancel, and all are on a deep red ground. In the splays of the east window are full-sized figures of St. Peter and St. Paul of fifteenth century date. On either side of the east window is a painted niche with a figure depicted on the wall above it. On the north wall are two scenes in the history of St. John the Baptist, viz. Herodias's daughter dancing in the usual conventional fashion before Herod, and presenting her mother with the head of St. John on a charger. These seem to be of the fourteenth century. On the upper splay of the north window is the head of our Lord with cruciform nimbus. On the east wall are painted the folds of a curtain, and there are zigzag borderings and other traces on various portions of the chancel walls, red being the predominant colour. At the desecrated Norman church at Hatford, in the same county, are remains of decoration, which have been brought to light by the falling away of the whitewash. On the south wall of the nave are two figures under a canopy, perhaps the Annunciation, and masonry and other ornamental patterns are everywhere visible. In the splays of the Norman windows in the chancel are red roses, and there are other remains in this part of the church. In the *Reliquary*, VI. new series, 147, is an illustration of the subject of the Crucifixion, stated to be still visible in 1892 on the walls of this church.

The very ancient church of Ford, near Arundel, in Sussex, has recently been undergoing restoration, and a

visit was paid to it last November.¹ On the north wall of the nave is part of what is said to be a Saxon consecration cross, and varied decoration, partly, perhaps, of the Norman period. On the south wall is a figure of our Lord with a group of other personages, and on the east splay of the east window probably the Agony in the Garden. Over the chancel arch is a large representation of the Doom, of the fifteenth century. On the north side are one or two groups of small heads with yellow hair. On the south near the middle are two groups of heads, and above the lower a large shield with the thumb of the angel holding it, probably as a protection against a demon, to the south of it. The group below no doubt represents the saved passing to the north. In the south corner are several demons, more heads, and probably the jaws of Hell. The figures are about two feet high, and the treatment of the subject is similar to that at Ashmansworth. In the south transept at Boxgrove, visited on the following day, is some decorative colouring not previously noted. Within a blocked Norman window in the east wall is a painted niche, and on the same wall a masonry pattern of double lines and foliage, and perhaps a portion of a large subject. In the south-west corner is a small figure and an indistinct object below it.

At Breamore Church, Hampshire, visited in May, 1898, is the interesting sculpture of the Rood, now within the south porch over the south doorway, and described in Vol. LV. p. 86, of our Society's journal. The figures of our Lord on the Cross with the Virgin and St. John have been sculptured in stone, while the intervening wall spaces have been painted with a church, etc. and the sacred monogram and other decorations appear on the east and west walls. The treatment is less elaborate, but carried out on the same principle as the well known representation of the Doom at Wenham Church, Suffolk.

At the little church of Ashmansworth, also in Hampshire, some early painting had been previously discovered on the north side of the chancel, which was referred to

¹ A full description of the church and its paintings has been communicated to the *Sussex Archaeological Collections*,

xliii. 105, by Mr. P. M. Johnston, the architect for the restoration of the church.

in my paper read before this Society in 1896, but it was not until last year, when a more systematic scheme of restoration was commenced, that the walls were properly examined. At the request of those interested in the work, I paid a visit to the church in September of last year. I found that considerable remains of paintings had been uncovered on the nave walls, the most notable being on the east wall, above and on either side of the chancel arch. On and above the arch is a trellis pattern formed by pale red intersecting lines, and there have been two tiers of subjects divided by a deep red border enclosing scroll foliage. Above has been a similar border mixed up with later paintings. On the lower tier have been four large subjects within circular medallions. The ground between them has been painted a deep red, but the figures are now only shown in outline. The subject on the north has been obliterated, but the next one is a representation of the Descent into Hell. There is a tall figure of Christ with bare feet, trampling on a prostrate demon, with various figures kneeling before Him. More figures are portrayed emerging from the jaws of Hell, which are depicted by a semi-circular band of yellow on the south side. A border of roses of later date has been painted over the lower portion of the picture. In the next medallion to the south of the chancel arch is a large tomb, much resembling the back of a chair or bed, with at least four nimbed figures at the side of it. This is probably intended to portray the Marys at the Sepulchre and the Resurrection. Between this and the next medallion is a church with curious cupola or low spire at the west end, and red lines indicating the slope of the roof. In the next compartment under a semi-circular arch are several nimbed figures and a large white dove with extended wings above them, no doubt a representation of the day of Pentecost. The various figures in this series are about three feet in height. In the tier above are several large figures, those over the chancel arch with the nimbus, and they seem to have formed part of an early representation of the Doom. The date of this series seems to be late in the twelfth century. The royal arms and supporters have been painted on the wall over the central portion of the

subject. Above and probably over the earlier painting is a late fifteenth century picture of the Doom. The legs of several nude figures are visible on the north side, evidently hurrying towards the north, where the gate of Heaven is usually depicted. A figure in a shroud, and two more rising from the tombs, and fragments of others also remain. In the upper south corner is a very large demon with long tail above several figures with clasped hands and perhaps flames of fire, indicating the jaws of Hell. The groundwork is green, and the treatment similar to the same subject at Ford (see *ante*). On the north wall are traces of the earlier painting, and a seventeenth century version of the Lord's Prayer, and farther west part of a fifteenth century portraiture of St. Christopher with some indistinct black letter inscriptions. On the south wall are traces of other subjects and seventeenth century texts. On the north wall is the outline of a consecration cross, and there are two more on the south.

At the neighbouring church of Burghclere numerous paintings were discovered some years ago, but have been whitewashed over. One of the subjects is said to have been the martyrdom of St. Sebastian. At the fine Norman church of Kingsclere some interesting decoration was found within the splays of the Norman windows in the nave, but it has been entirely destroyed.

At Salisbury Cathedral the great west door has been elaborately ornamented with painted figures under canopies now very indistinct. Several other recent finds in Wiltshire have been brought to my notice by the Rev. E. H. Goddard. At the noble church of Bishops Cannings¹ figure subjects were found in an arched recess on east wall of transept, and thirteenth century masonry patterns on the walls of the transept and the vaulting of the chancel. At Purton² Church considerable remains of colour, and the raising of Jairus's daughter, a rare subject in mural painting, were brought to light during the restoration, and at Wanborough³ Church, on the north wall, our Lord's triumphal entry into Jerusalem. At Imber Church is some decorative colouring on the

¹ *Wills Archaeological Magazine*,
XXIII. 9, 10.

² *Ibid.*, XXIII. 237.

³ *Ibid.*, XXIII. 243.

nave arcade, and on the north wall of the north aisle, a series of paintings, one probably the purging of the seven deadly sins. At Keevil Church, the fifteenth century decoration of the nave roof has been discovered and restored. At Brinkworth Church the wall over the chancel arch has been richly coloured, and there are two courses of decoration on either side. On the north wall is an angel (?), and remains of larger figures. On a pillar near the south door is the painting of a saint, and remains of colour are visible on the east column of the south nave arcade. This is mainly of fifteenth century date. At Lacock Abbey two paintings were found at the back of the lavatory. In the larger recess is the abbess carrying her crozier and kneeling to a saint, probably St. Augustine, who is in the attitude of benediction, while in the smaller recess is apparently a female saint, the most distinct portion being the head of a crozier.

At Charminster, Dorsetshire, where the church was visited by our Society in 1897, and by me in September of that year, a good deal of painting had been recently brought to light, though unfortunately in a rather fragmentary condition. Over the chancel arch have been a series of subjects, but only one, probably representing the descent of our Lord into Hell, seems capable of identification. There is some very beautiful decoration on the north and south walls of the nave near the east end, of date about 1500, and the Creed and some early texts. On either side of the upper part of the tower-arch is painted a tree, that on the north with pale red leaves and branches; that on the south is black and yellow, and growing out of a vase. On the north-east buttress is painted the word "MORO."

At the parish church at Barnstaple, in Devonshire, on the south wall at west end of north aisle, is a large figure of a bishop in the act of benediction, standing probably over a prostrate figure not now discernible, while an abbess holding a crozier stands on the opposite side.

At Poundstock Church, Cornwall, two very interesting paintings have been recently uncovered, and were inspected by me in October of last year. There have been three subjects on the north wall of the north aisle, over

and at the sides of the north doorway. Of the central subject nothing can now be made out. That on the west side, surrounded by a scroll border, is a representation of the Tree of the Seven Deadly Sins, showing the head of pride with an attendant demon at the top, and the other sins at the extremities of the branches. There have been scrolls with the title of each sin, but only one on the east side remains. The painting is not very distinct. The subject on the east is the Christian representative surrounded by various implements.¹ The figure is outlined in yellow, above life size, and rather indistinct. It may be partly in armour. There is a saw right across the body, and other metal instruments, such as a sickle, shears, balances, sword, knife, gridiron, etc. are depicted around it. There is a similar border to the other picture with a red rose at each corner, which seems to indicate that it was executed in the reign of Henry VI., or about the year 1450. The chancel screen with figures of saints on the panels had been removed to the vicarage on the occasion of my visit.

At Poughill, in the same county, visited on the following day, are two large representations of St. Christopher, which have unfortunately been brilliantly repainted at the instance of the late vicar. On the north wall of the north aisle, within an elaborate border, is the larger of the two pictures. In this example the saint is crowned, the vicar having adopted the theory that this was St. Olave, though no trace of a crown is visible in an original drawing of the unrestored painting which has been shown to me. It has all the usual adjuncts of the subject of St. Christopher, our Saviour on his shoulder, the hermit with his lantern and cell, the fish in the water, a mermaid, boats, etc. Some white roses on the border show the date to be about 1470. Nearly opposite, on the south wall of the south aisle, is the second example, very similar in its treatment, and undoubtedly of the same date. The figure of the saint is at least eight feet in height, and in this instance he is not crowned. Part of an inscription in English, "Bear I never so heavy a burth," and the word "wonder" can be deciphered. The border is similar to that in the north

¹ For list of similar examples see *Archæological Journal*, LIII. 177.

aisle. It is very curious that this subject, popular though it undoubtedly was, should thus have been twice painted at the same time in a small remote country church.

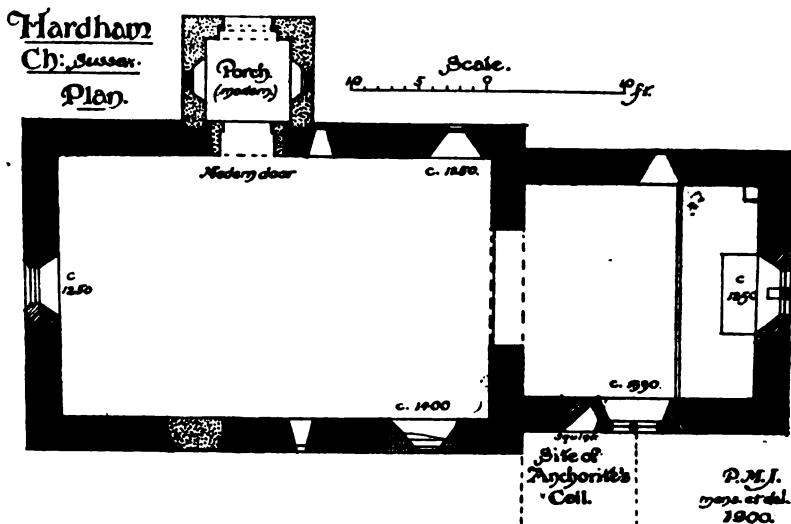
On the north wall of the chancel of the church of Morwenstow, visited on the same day, is a painting supposed to represent St. Morwenna. Under a rounded trefoiled arch coloured yellow is a female figure with veil, yellow dress, and cloak outlined in red. She holds a book in the left hand and is giving the benediction with the right over the head of a kneeling figure of a priest with his hands clasped. There is some decoration in yellow above. The figures are rather over half life size. Does this represent the priest who built the chancel in the thirteenth century, invoking the blessing of the patron saint on his work? The date of the painting is about 1250. On the north side of the chancel is preserved a curious piece of wood carving, with a castle and various animals and heads, all richly gilded and coloured. It may date from the fifteenth century.

In addition to these paintings in our churches, a few examples have been noted in our domestic buildings. On the wall of the attic at Costessey Hall, Norfolk, is depicted a view of a park with trees, palings, and various figures. It seems to be coeval with this part of the house, which was erected in 1564. At Pevenssey, Sussex, is an old house, said to have been occupied by Edward VI. and his tutor. In an upper room is part of a border in grey, with winged cherubs outlined in grey, part of a crown, etc. There is a date on the house, 1542, and the painting may be of that period. At an old house facing the church at Newbury, Berkshire, some thin fascia boards had been affixed to the main beams of the ceiling of two large rooms on the first floor. On these some sentences in black letter had been painted, an account of which appeared in the *Morning Post* of September 7th, 1897. From the character of the borders and lettering they most probably date from the time of Henry VIII. At Brightwell, near Wallingford, also in Berkshire, some paintings have been found on the walls of an old cottage, apparently illustrating texts from the Song of Solomon, and of early seventeenth century date.

HARDHAM CHURCH, AND ITS EARLY PAINTINGS.

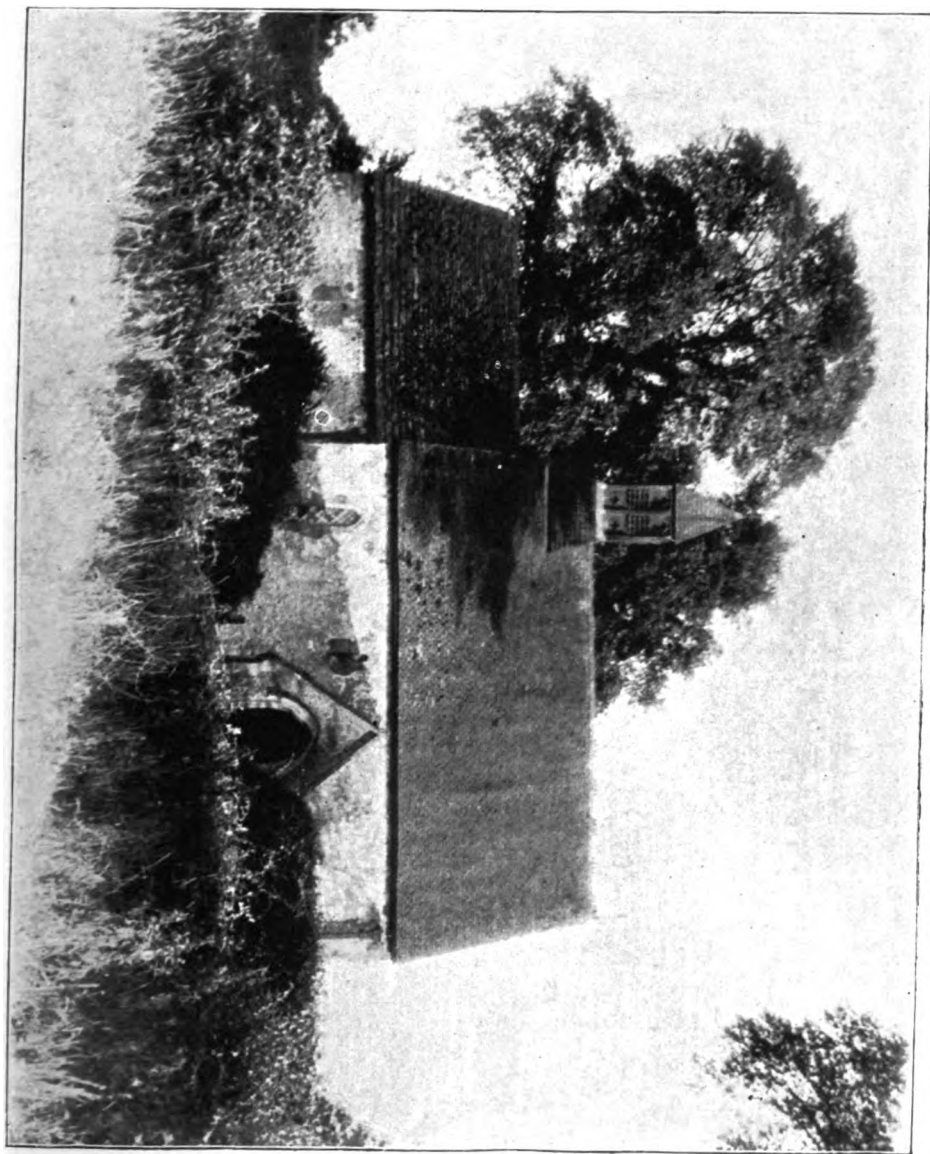
By PHILIP MAINWARING JOHNSTON.

The little church of St. Botolph, Hardham, in the valley of the Arun, a mile or so to the south of Pulborough, in West Sussex, is typical in its utter plainness and small dimensions of the early churches of this part of the county.¹ Coates, Selham, Chithurst, Burton, Tangmere, Eastergate, and Ford are but a few of these tiny ancient sanctuaries, all built of the rudest materials and on the simplest lines, and all, if not pre-Conquest in plan and in their main features, at any rate of a date within the eleventh century. (Plate I.)



¹ The dedication to St. Botolph favours a pre-Conquest origin for the church. A view of the church as it appeared about the end of the eighteenth century occurs in Horsfield's *Sussex*, II. 153. This shows a remarkable hollow yew tree of great size and immense antiquity, of which no vestige remains. Besides its ancient church the parish still contains the ruins of the Priory of the Holy Cross, an Augustinian foundation, dating back to the twelfth century at least. The

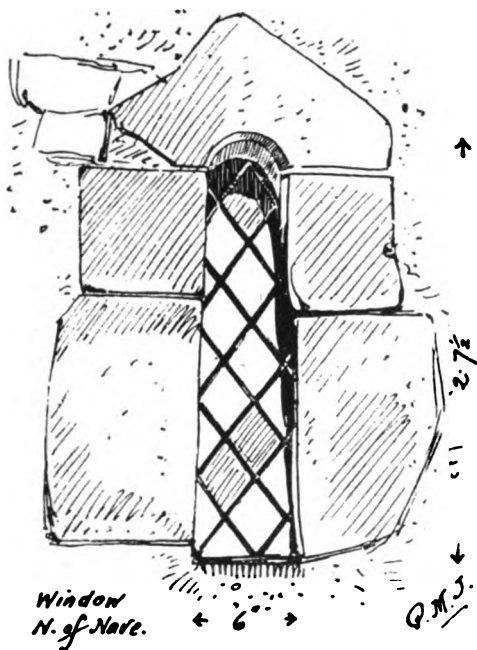
existing portions comprise the very beautiful chapter-house of mid-thirteenth-century date, and the undercrofts of the refectory and dormitory, the latter being probably over the canons' day room. See, for further particulars, *Sussex Archaeological Collections*, XI. and XVIII., wherein views and a plan are given. It is much to be wished that further excavations could be undertaken to recover the plan of the church of the priory.



HARDHAM CHURCH FROM SOUTH.

From a photograph by P. M. Johnston.

In plan Hardham, like the others, consists only of nave (31 feet 6 inches by 19 feet) and chancel (17 feet by 15 feet 6 inches), with the addition of an incongruous modern porch. The east wall of the chancel and the west wall of the nave converge towards the south; otherwise the lines of the building are quite regular. There is a modern wooden bell-cote at the east end of the nave, replacing an old one, containing two bells. The roofs are ancient, and that of the chancel is still partly



covered with stone slabs. The materials used for the walling are the local sandstone and ironstone rubble, with quoins, etc. of the same local stone, hammer-dressed,¹ while in the chancel many Roman bricks and tiles are visible, some of the latter impressed with characteristic scoring-patterns. A mass of the bricks in their original mortar does duty as part of the south-east quoin of the chancel. The ancient plaster remains on the walls for the most part, externally as well as internally. Of the original

¹ There is not a trace of the Norman axe-tooling on any of the quoins or other dressed stonework.

features, one window in the north wall of the chancel and one each in the north and south walls of the nave, together with a door in the south wall of the latter, remain. These are quite archaic in character. The nave windows are narrow slits, very slightly splayed to the interior, with no rebate or other provision for glazing, and the external jambs incline upwards to the circular head of the opening, which is cut out of one large stone. The jambs of the chancel window are splayed out to a wider angle (no doubt for the greater need of light), and externally there is a shallow shutter-rebate, which, however, may not be original. The *internal* jambs of this window incline towards the head.

The doorway in the south wall of the nave (now blocked up) is even more archaic in appearance than the windows. It has perfectly plain jambs, worked in large blocks of sandstone, and crowned by a massive flat lintol, tapering on its upper edge towards the ends, and over this is a rough discharging-arch. There is not a vestige of moulding or ornament to relieve the bare outlines.¹

The chancel-arch, a bold semi-circle slightly horse-shoed, is also square-edged and perfectly plain, except that the chamfered imposts have had a small bead-moulding partially worked upon them, perhaps at some subsequent period.² It is greatly to be regretted that, at the restoration in 1866, the ancient plaster was removed from this arch, and its rough hammer-dressed stonework exposed, the joints being then pointed with cement in the loathsome fashion so dear to builders. In this manner portions of the ancient paintings covering the plaster of the arch were destroyed.

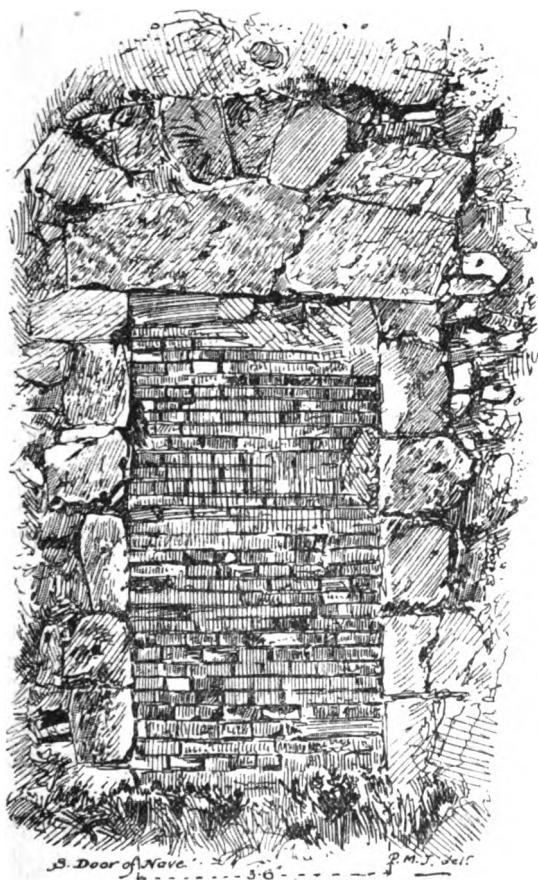
The east window consists of two broad lancets divided by a wide pier-mullion, the thin masonry above being pierced with a small opening of pointed-oval shape—the whole forming an interesting and early essay in plate

¹ At Burpham, hard by, is a similar square-headed door, but the lintol there presents a curious and early instance of joggling. Close to it is an undoubtedly Saxon window, and probably both are of the same date.

² But the same moulding occurs in an upper window of the Necessarium at Westminster Abbey, a piece of the un-

touched work of the Confessor, brought to light, alas! only to be destroyed or hidden by recent extension of the School buildings. The abaci of the caps had a quirked bead and chamfer, and the cushions were carved with tau crosses and palm-leaf angles. I was able to obtain careful sketches before the work was masked or destroyed.

tracery. The internal head is flatly arched in one segment. Its date is about 1250, and it possibly replaces a single slit window of the original work. Below the central mullion, on its internal cill, is a singular block or corbel evidently designed to support the altar cross, a purpose which it once more fulfils. In the north-east



angle of the chancel is another corbel, possibly intended as a lamp or image bracket, or perhaps as one of the supports for the altar beam carrying the ornaments.

To the same date (1250) belongs the lancet in the eastern part of the north wall of the nave, the rear arch

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of which (as in the east window) is of flat segmental form in one sweep. This was, no doubt, inserted to light a small side altar.

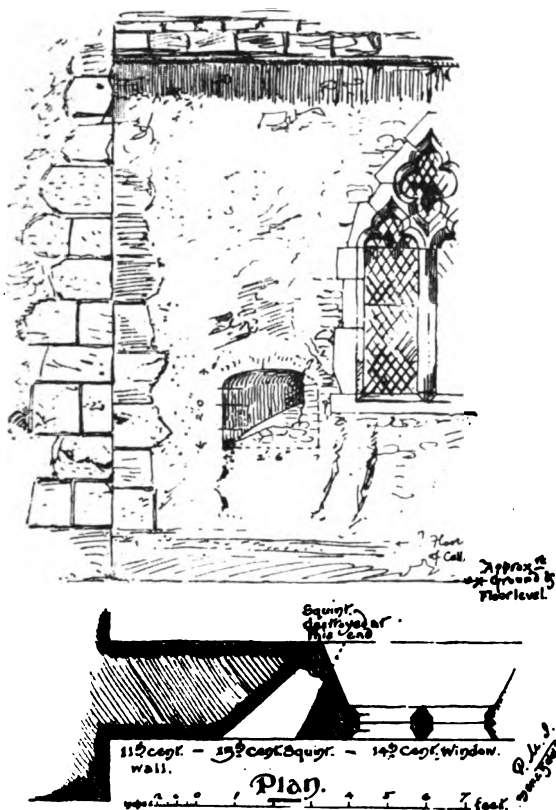
The wide pointed-arched window in the west wall, of nondescript character, may also be an insertion of this period, perhaps in place of one of the early openings, but it may be as late as the seventeenth or eighteenth century. Another wide and rudely formed window, with a peculiar trefoiled head, probably of early fifteenth century date, has been inserted in the eastern part of the south wall of the nave. This may also have had some connection with an altar; its flat internal cill and nearness to floor and ground seem to place it within the category of what are termed low side windows, the usual position for which was the south-west corner of the chancel. Such a position was impossible in this instance, for a reason that will presently be seen. There is no present trace of either piscina or aumbry in the chancel or nave; they may, however, still exist behind the plaster.

In the south wall of the chancel is a two-light decorated window, the existing tracery of which is a restoration; and immediately to the west of this is a feature of peculiar interest which it was my good fortune to discover last summer.

This is nothing more nor less than an anchorite's Sacrament-squint, which pierces the wall in a slanting direction so as to exactly command the mediæval altar, which must have stood a yard or more clear of the east wall. It was in searching for a low side window in this, its normal position, that this singular squint came to light.

There can be no doubt that it served the purpose of enabling the occupant of a small anchorage attached to the south wall of the chancel to watch the pix containing the reserved Sacrament, to join from his narrow cell in the masses offered at the high altar, and to receive through this small aperture the consecrated Host and chalice. The squint is far from perfect. On the exterior, however, enough remains to show that it measured 2 feet 6 inches in width by about 2 feet in height, the head being roughly arched in an elliptical form, and sloping

downward to the interior; the head and sides of the aperture were smoothly plastered. The cill, from the cell side, must have been not more than 2 feet 6 inches from the floor, requiring the recluse to be in a kneeling posture to make use of the squint. Of the opening on the interior face of the chancel wall hardly a trace remains,



Anchorite's Squint, Hardham.

the whole squint having been cut into and partially destroyed in the formation (c. 1330) of the large window adjoining. We have thus plain evidence that the cell to which this squint belonged must by that date have fallen into disuse.

As to the date at which the ankerhold and its squint

were made we can guess with tolerable certainty. From the character of the opening it is evidently not coeval with the eleventh century wall in which it has been pierced; nor has it any of the marks of Norman work, early or late, about it. We are helped to decide the date by a bequest in the will of the famous Sussex saint, Richard de la Wych, Bishop of Chichester. He seems to have been a special patron both of the friars and of the anchorites (he was at one time a Dominican himself), for in his will, made probably in the year of his death, 1253, bequests to two male and three female recluses are specified. Among these we find the recluse of Hardham.¹ As St. Richard became Bishop of Chichester in 1245, it seems likely that he superintended the inclusion of the anker at some time between that date and 1253, and that the cell may have been built at the same time. It thus remained in use probably for 70 years or more.

The cell in this instance was almost certainly a light and simple erection of wattle-and-daub, some 8 feet square internally and probably roofed with thatch, or reeds from the river hard by. Had it been of more massive construction we should have traces remaining of its roof and walls against the chancel wall and nave quoin. It must have had its grated and shuttered opening, probably on the western side, for the admission of food supplies, and other needful uses; and through this narrow aperture the recluse held converse with such as sought him, administered ghostly counsel, and, if a priest, heard confessions and shrove the penitent. And on the eastern side was perhaps another small aperture, high up and glazed with

¹ "Also to Friar Humphrey, the recluse of Pageham, 40 shillings. Also to the female recluse of Hoghton half a marc (6s. 8d.). Also to the female recluse of Stopham half a marc. Also to the recluse of *Heringham* half a marc.

Also to the female recluse of the Blessed Mary of Westoute at Lewes 5 shillings."

Printed in *extenso*, with an excellent translation and copious notes, in *Sussex Archaeological Collections*, I. 164.

HERINGHAM (*Heriedeham* in Domes-

day), is the modern HARDHAM. It is very probable that these recluses had all been admitted to the Order and "included" by Bishop de la Wych, who thus shows a lively interest in their support. There must have been a great many more in Sussex in the thirteenth century than we have any idea of at the present day. Houghton and Stopham are both but a few miles from Hardham; Pagham, on the Selsea peninsula, is in the extreme south-west corner of the county. I am not aware that any search has ever been made for traces of the cells at the two former churches.

horn, for the admission of light.¹ It was a strange life, but we must suppose it presented attractions to the devout in those rough times, or else many would not have voluntarily chosen to relinquish their freedom and be virtually buried alive for the remainder of their days. Doubtless where the spirit is free it is always true that

“Stone walls do not a prison make,
Nor iron bars a cage.”²

The nave is still for the most part seated with the massive oak benches of fifteenth century date, with plain but well designed square ends; the font, also plain, is probably of the same date. The communion rail bears date 1721, and is good of its kind. The porch and north door are modern and incongruous. There are no monuments of any antiquity or interest.

So much for the building. I now come to the very important series of paintings with which the entire church is covered. In considering them I shall refer, from time to time, to two strikingly similar series of paintings—now alas! no longer in existence—in the churches of Plumpton

¹ One of the statutes of the Synod held by Bishop Richard de la Wych in 1246 lays down certain regulations as to recluses. They were “not to admit or have any person in their dwellings of whom grave suspicion might arise. Their windows were also required to be narrow and convenient; they were permitted to have intercourse with those persons only whose character did not admit of suspicion. The custody of the vestments of the church was not, except in cases of necessity, to be delivered to female recluses.”—*Wilkins's Concilia*.

² In the Pontifical of Bishop Lacy, written in the fourteenth century, is an office “*Reclusio Anachoritarum*,” wherein the Sacrament of Extreme Unction was administered and the commendatory prayer for the soul of the recluse was offered, lest in his solitary condition he should die without these rites. Part of the office for the Burial of the Dead was also recited to emphasise the fact that the anchorite, already dead to the world, had entered his

sepulchre. The *Sarum Manual* contains a like office, “*Servitium Includendorum*.” These anchorites and anchoresses took vows of lifelong inclusion after a certain period of probation and with the express license of the bishop of the diocese. The door by which they had entered their cells was either locked and the key taken away—the bishop putting his seal thereon—or else walled up with solid masonry, only to be broken down on the death of the solitary inmate. The recluse was commonly buried under the floor of his cell, which was then cleansed and prepared for a fresh occupant.

The *Anceren Riwele*, of early thirteenth century date, printed for the Camden Society, gives us much curious information as to the manners and customs of ankers and ankeresses. Cf. also papers printed in the *Archæological Journal*, XLIV. 26, and XLV. 284. I have given a drawing of a cell still remaining at Hartlip Church, Kent, in *Sussex Archæological Collections*, XLII. 177.

and Westmeston, near Lewes, some 20 miles to the east of Hardham.¹

The Hardham paintings are, without doubt, among the oldest remaining in England; they are specially noteworthy also for the variety and brilliancy of the colours employed, for the remarkable details, and for the extraordinary state of preservation of parts of the work. I have assigned a date between the years 1050 and 1100 to the building, and it will, I think, be evident on examination that the paintings can hardly be many years later than the latter year. Though brought to light about 1866-8 by the late rector, the Rev. J. M. Sandham, the uncovering of the paintings was not very thoroughly or carefully done, and many important details were still hidden till last summer, when as much of the whitewash as it was possible to remove was taken off by myself and others. They were then twice sized and twice varnished with a tough white varnish. In the earlier uncovering it is to be feared that much injury was wrought, partly by unskilful or hasty handling, and also, inevitably, from the close adhesion of the whitewash to the surface of the painting. In addition, eight centuries of exposure to various destructive agencies—of which the damp and unsheltered situation of the church was not the least—have caused large portions of the surface of the plaster to disintegrate, and the painting has, of course, been slowly perishing with it. So durable, however, was the medium originally employed, that even where this has occurred stains and outlines of figures, nimbuses, and architectural settings remain in the plaster to indicate the nature of the subjects. Unfortunately, a modern distemper dado has obscured part of the lower range of paintings in both nave and chancel.

The paintings throughout are in two tiers, the upper much better preserved than the lower. A modern doorway on the north side of the nave has wrought much

¹ I feel tempted to add a third church, that of Clayton, in the neighbourhood of the other two, but I have not my full data at the time of writing; and also I hesitate to controvert the opinion of so eminent an authority as Mr. C. E.

Keyser, F.S.A., who ascribed the Clayton paintings to so late a period as the latter half of the thirteenth century. If I am too early, surely he is much too late.

injury to some of the subjects, as also have the various ancient inserted windows.

The medium used is one of the most curious questions connected with the work. An enamel-like face, especially noticeable when the whitewash was freshly removed, seems to render it certain that a varnish was originally employed to give a glaze to the finished paintings. The colour below this glaze is very thick and tough, several coats being applied one over another in many places, and over all in some cases a thick white body colour is laid on for the borders, etc. the effect of the work being exactly similar to oil painting. I incline to think that we have in reality a combination of pure tempera and oil painting, the ground colours and broad masses being laid on in the former, and the latter being applied in the smaller details belonging to the last stage of the work, and then the whole glazed over with oil, or oil varnish. The writer of an account of the now destroyed paintings at Westmeston,¹ the work in which was precisely similar in technique, style, and date, says: "The colours used are distempers, and in one or two places *there were traces of varnish.*"²

The colours employed are chiefly a deep Indian red, pink in various shades, and flesh-tint; a rich yellow ochre, and brown umber (chiefly in outlines of features and nimbuses); and a vivid emerald green in some of the nimbuses, etc. White is freely used to heighten the outlines, features, and hands, and to give relief to the robes. It also is applied as a body-colour in dotted patterns on some of the dresses; for the lettering of the descriptive sentences connected with some of the subjects, and as a peculiar undulating border or lacing which edges some of the compositions.

¹ *Sussex Archaeological Collections*, XVI. 1. By Rev. C. H. Campion, M.A.

² It is difficult to fix with certainty the antiquity of oil as a medium in painting; probably it is at least as old as the Christian era, but it seems to have come into general use very slowly and partially, and at first to have been employed chiefly in connection with small articles of furniture, rather than with large surfaces of buildings. We

have recorded instances of its use in the thirteenth century for wall-paintings, and it is probable that in the two preceding centuries its use was not unknown, either alone or as a finishing process in connection with tempera painting. Varnish is set down among the materials used in executing the paintings in the royal palace of Westminster, temp. Henry III. (see the Accounts, printed in *Vetusta Monumenta*, Vol. VI. 1842).

Beginning with the WEST WALL of the nave, let us now examine the paintings in detail.

This is the worst preserved of all. Only the upper tier remains, and this has been half-destroyed by the insertion of the large window. The subject is "THE TORMENTS OF HELL," apparently. Large figures of demons are shown hacking the arms and legs of lost souls, the gashes and blood being very realistically indicated. The demons are grotesquely ugly and bear some resemblance to those in the famous twelfth century painting at Chaldon—also on a west wall.¹ The figures are of flesh-tint against a dark red background.

The scenes depicted in the upper tier on the north, south, and east walls of the nave are concerned with the nativity and infancy of our Lord, those in the lower, of which but little remains, being mostly of a legendary or allegorical character. To take these in their proper sequence we must commence with the EAST WALL OF THE NAVE. (Plate II.)

Here, beginning on the southern side, we have in the upper tier "THE ANNUNCIATION," the most perfect of any of the subjects represented. On the left is the Archangel Gabriel, the forefinger of his right hand emphasising the message he is delivering to the Blessed Virgin. His arms are crossed over his body to enable him to do this, and in his left hand is a lily-sceptre.² The Blessed Virgin—over whom the Holy Dove is hovering—spreads out her hands in the Eastern attitude of prayer. She wears a curious three-lobed crown or tiara of Byzantine character, from which depends a veil. Both figures have nimbuses of a peculiar oval form and a rich emerald green colour; their dresses consist of a long robe of a deep Indian red colour, that of the angel being somewhat fuller and shorter, displaying an under tunic of white, while the Blessed Virgin's, which fits closely to the body, has a broad white band above the feet. Over her shoulders falls a mantle of the same deep red, lined

¹ See account in *Surrey Archaeological Collections*, V, with coloured drawing to scale. By J. G. Waller, F.S.A.

² There is something extraordinarily Byzantine in these elongated yet not

inelegant figures and in the pose of the hands. They remind one more of figures in the mosaics of Ravenna and elsewhere than of anything in English wall-paintings.



EAST WALL OF NAVE. UPPER

LOWER

with white. The sleeves of both figures are short and bell-mouthed, and those of the angel have a border or lining of emerald green. The drapery folds are very peculiarly treated—archaic and conventional to a degree. The red dresses are powdered with groups of three little white pellets, while the outlines and folds are in a peculiar whitey-brown colour. Note the remarkable wavy feathering of the angel's wings, the style of the hair—parted in the middle¹—and the curiously *wooden* expression of the faces. The eyes in most of the figures are set obliquely, and the iris is drawn like that of a cat's eye. The Virgin has pointed white shoes, while the Messenger's feet are bare. The Dove is delicately drawn with light brown outlines, round his neck is some crimson feathering, and on the wings black "eyes." Both figures stand upon a golden pavement, represented by a diaper pattern in red upon a rich yellow ground, and the same yellow, with a different pattern (a sort of diamond scale work, having a white dot and red line through the centre of each scale), forms the wall or background behind the upper part of their bodies. Beneath is a dado of red hanging, edged with a white scalloped border, and upon this is a roughly smeared pattern of crosses and fleurs-de-lys.² On the left of the Announcing Angel is a trellis border formed with red lines on a pink ground, in the centre of each diamond being a white star.

To the south of "The Annunciation" is "THE SALUTATION," the subjects being separated by a remarkable tower, perhaps intended for the Virgin's house. The lower part of this is covered with a trellis pattern of red lines, recrossed with pink, on a cream ground, the edges being bordered with the scalloped white line before mentioned.³ These borders, which are about an inch wide, are used throughout to separate the subjects one from another and to emphasise parts of the subjects. In the case of this tower they run up to the horizontal border over the whole range of subjects, giving at a

¹ Said to be a traditional rendering of *arch-angelic* coiffure.

² These no doubt refer to the purity of the Blessed Virgin, and that which her faith was to eventuate in—the redemption through the Cross.

³ This white lacing or scalloping is one of the peculiarities of the Plumptre and Westmeston paintings. It is met with in a slightly different form in the eleventh and twelfth century paintings at St. Savin, Poitou, France.

distance the appearance of pinnacles to the angles of the tower. The upper stage of the latter has a curious arcade which looks at first sight like three trefoiled arches, giving a later character than the painting generally bears; but this at once disappears on a closer inspection, for the arcade is seen to be composed of three little horseshoe arches on shafts, having plain capitals and bases of a conical shape. A moulded cornice and pyramidal roof, shaded in pink, red, and white to represent tiling, surmount the arcade.

To the right of the tower are the figures of Mary and Elizabeth; the faces, unhappily destroyed by an old settlement¹ in the wall, are represented only by parts of the nimbuses, which in this scene are yellow instead of green. The Virgin's dress is dark red as before, while that of Elizabeth is yellow, and both are powdered with the same white dotted pattern.² The figures are bordered on the right by a pink wall (? Elizabeth's house), lined out with diminutive "stoning"; and this, with some vertical bands of white yellow and red, completes the subject.

Above these two scenes is a very interesting inscription in white letters on a dark red band. The forms and curious contractions of the lettering can be better gathered from the accompanying reproduction (Plate III.) than from a description. It is what is known as a Leonine hexameter, and reads, without the contractions, as follows:—

✠ VIRGO SALVTATVR · STERILIS FEEVNDA
PROBATVR ·³

the C in "fecunda" being square—a mark of early date—and the minuscule b in the last word is also noteworthy. The shape of the S has a foreign look.

These Leonine verses were a remarkable feature of the destroyed Westmeston paintings, where they were

¹ Two or three large iron holdfasts have been driven into the wall hereabouts, either for the support of the Tables of the Commandments, etc. or some other purpose. These have wrought, fortunately, less injury than might have been expected.

² The writer of the account of the paintings at Westmeston describes these little groups of white spots as buttons!

³ "The Virgin is saluted. The barren is proved fruitful."



painted in an exactly similar manner, *i.e.* in Roman lettering, white body-colour on a dark ground, with the same style of contractions; while the square C also occurred—a strong corroborative proof that the paintings were of much the same date or even by the same workmen—as to which more anon.¹ Roman lettering in white on red was found in the paintings (also most reprehensibly destroyed) at Plumpton: one word was very distinct—**MIHAEL** (Michael)—and the white scalloped border and other peculiarities seem to attest the same hand at work as at Westmeston and Hardham.² At Westmeston there was a slight difference in the treatment of these Leonine hexameters, for instead of a plain red ground for the white lettering, the “field” of the texts was divided horizontally, half being painted yellow and half red, the lettering falling partly on each colour. The same idea, modified, is present at Hardham, where, as the plates show, the red text-strip has a yellow margin.

Doubtless the artist's intention was to affix a Leonine verse to all the subjects, but it does not seem to have been thoroughly carried out at Hardham, where remains of only two or three other inscriptions can be traced. At Westmeston, on the other hand, they seem to have accompanied all the pictures.

Coming now to the south wall of the nave, the series is continued in the upper tier, going westward, with

“**THE NATIVITY**” and “**VISIT OF THE SHEPHERDS**,” far less perfect than the foregoing. Here the Blessed Virgin is seen reposing upon a couch with a red coverlet

¹ White letters on a red ground occur on the splay of a Saxon window in the ground story of the central tower of St. Mary's, Guildford. This tower was not originally central but western, and the windows (which are double-splayed) external, but when a nave and transept were added and there was no further need of these ground story windows they were blocked up, with the Saxon painting on the splays, and *Early Norman* arches opened beneath, partly destroying the windows. We have thus indisputable evidence that the painting is eleventh century or pre-Conquest. That on the splay of the south window used to show a figure of Abraham offering up

Isaac, and the letters **BRAHAM** **OTR** **da** are still faintly discernible.

² The same writer described the paintings at both Westmeston and Plumpton in the XVIth and XXth Vols. of the *Sussex Archaeological Collections*, respectively, and while, quite correctly, claiming a date early in the twelfth century for the former, he is strangely blind to their obvious identity of date and workmanship, and in the case of Plumpton supposes that the paintings belong to “*the reign of Richard II.*” One smiles at the perversity of ingenuity by which he seeks to establish this extraordinary conclusion.

spotted with white dots; her head resting on a richly diapered pillow; at her feet Joseph is seated in an attitude of meditation, partly wrapped in the folds of a curtain which is gracefully draped above and around the bed.¹ Beyond, with a domed roof, diagonally striped piers, diaper-work, and other peculiar architectural features, is seen the stable of the inn, in which are the ox and the ass watching over the swaddled child lying in the manger, and the entrance to this stable is being shown by a diminutive genuflecting figure, who is apparently acting as guide to three shepherds—if not one of themselves. All these figures are imperfect and very indistinct, but both the guide (? an angel) and the shepherds, who are very much larger in proportion, are dressed in tunics not reaching to the knee, with tight-fitting hose and long pointed shoes, dark red in colour. One of the little early windows follows this subject, being set in a framework of turrets and walling somewhat similar to those which occur in “The Annunciation” and “The Salutation.”

“THE APPEARANCE OF THE STAR” seems to have been the next subject, but it is almost entirely obliterated. Remains of a trellised tower divide it from

“THE MAGI ON THEIR JOURNEY.” Three figures on foot, in tunics, travelling-cloaks, and close-fitting hose, with pointed shoes. They have apparently Phrygian caps, or some similar form of head-covering, and carry staves or spears—it is difficult to say which. Before them is another wonderful bit of turret architecture—Jerusalem, or perhaps Herod’s palace—in which trellis-work,² coursed masonry, a horseshoe-arched arcade (similar to that in “The Annunciation”), and some other peculiar masonry are seen. The last-named may be the painter’s notion of herring-bone work.

The last subject represented on the south wall of the nave is very indistinct. It is either intended for “THE INTERVIEW OF THE MAGI WITH HEROD,” or else,

Cf. MS. Cott. Claud. B. IV, in Brit. Mus., date eleventh century, for treatment of bed, etc. Joseph is usually represented, as in this instance, seated in a contemplative attitude in early paint-

ings and illuminations of this subject. Cf. Benedictional of St. Æthelwold and Missal of Robert of Jumièges.

² No doubt intended for stone diapering, or else *opus reticulatum*.

as appears more likely from the difference in dress, "HEROD CONFERRING WITH THE CHIEF PRIESTS AND SCRIBES." A tower adjoining that last described, borders the subject, in which a seated figure on a dais can be made out with an attendant behind and two figures before him. These have staves of some sort in their hands and mitre-shaped headdresses. The one in front has a white tunic, striped horizontally with red, white hose, and red shoes, while the other's costume is mostly red. Another strip of masonry work, part of Herod's palace, completes the scene.

Passing on to the upper tier of paintings on the north wall, we find, beginning at the west end (Plate IV.)

"THE MAGI PRESENTING THEIR GIFTS." The architectural setting is fairly distinct and very curious—two circular arches flanked by turrets, with a third turret between them, supported by columns having capitals painted to represent carving. The Romanesque character of the turrets is very marked. Two of the Wise Kings stand under one of the arches (which is much wider than the other). They are shown with crowns of an early type—a simple band of metal—short tunics and outer cloaks, and long close-fitting hose—red in one case and white in the other. One holds a crescent-shaped object which may be intended to represent a metal "ship," or a dove, containing frankincense. The third kneels in the act of presenting his gift to the Young Child and His Mother, who are placed under the narrower arch. The Blessed Virgin is seated upon a low cushioned stool or seat, and holds the Child upon her knee, the latter being shown as though about two years old, in proper accord with the sacred narrative. Before the feet of the Mother and Child is what may be either a casket or a footstool. The Virgin has a sort of hood or veil, and a crown of similar character to that in "The Annunciation." Both Mother and Child are nimbed. I have as yet only succeeded in making the drawing here reproduced; a careful tracing from the painting would recover many obscure details.

The next picture represents (1) "JOSEPH WARNED IN A DREAM." The space is divided horizontally into two "floors" or compartments, in the upper of which, under

a canopy of two circular arches, Joseph, a bearded old man, is lying asleep, an angel bending over him with outstretched forefinger. (2) In the lower story, which is loftier and treated more richly, are represented "THE MAGI WARNED IN A DREAM." The three Magi are in bed, their heads reclining on large pillows, while over them also hovers an angel, with his hand emphasising the warning he is delivering.¹ There is some curious pattern-work upon the arches in this compartment—perhaps the remains of lettering—and the capitals are painted to represent carved foliage, while beyond to the right is a piece of pink wall lined out with miniature masonry.

"THE FLIGHT INTO EGYPT." Here Mother and Child are seated upon the ass, led by Joseph, who carries, I believe, a lantern, but the details in this scene are very obscure. This subject, somewhat similar in treatment, was among the destroyed paintings at Plumpton, but in another position—on the east face of the east wall of the nave, and in this Joseph was shown following behind carrying a flaming torch and a thick staff in either hand, while the Virgin guided the ass with the reins.

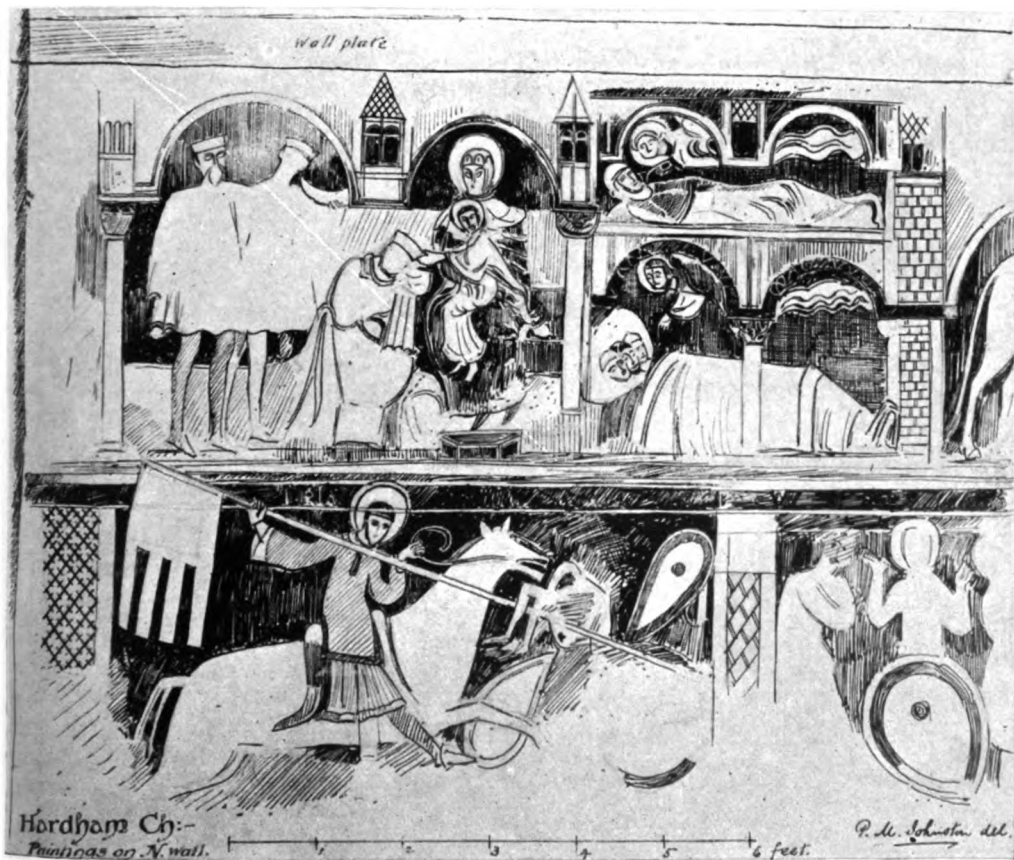
There is a remarkable adjunct to this scene in the Hardham "Flight" of which there is no record at Plumpton—nor indeed in any other ancient painting in this country to my knowledge—viz. the idols of Egypt falling out of their niches and being shattered at the approach of the Saviour of the World. There are four niches, two upper and two lower, and two nude idols are still erect in the former, while in the latter one is seen falling headlong and the other tumbling on to its knees, as though in involuntary worship.²

The single narrow-splayed early window in this wall follows the last scene. Its head and jambs are covered with a trellis pattern in pink bands upon a red ground.

¹ The Missal of Robert of Jumièges shows the three Magi wrapped in one coverlet, sleeping, with Phrygian caps on, and the angel bending over them to deliver his message.

² A very similar treatment of this curious subject appears among the

series of bas-reliefs on the plinth of the west front of Amiens Cathedral. This is at least a century later than our Hardham painting. Illuminated MSS. sometimes include this episode in connection with the "flight," e.g. Kings 5, f. 5, Brit. Mus.



WEST END OF NORTH WALL OF NAVE.

ABOVE: THE MAGI. THE DREAM OF JOSEPH. THE DREAM OF THE MAGI.
BELOW: ST. GEORGE AT THE BATTLE OF ANTIOCH.

"THE MASSACRE OF THE INNOCENTS." Herod's soldiers in short, full tunics and long hose (pink, with red shoes) are very realistically depicted slaughtering the children, whose frantic mothers are striving in vain to protect them. The Innocents are mostly naked. One of the mothers is being seized by her hair.

The large thirteenth century lancet destroys the next subject, and brings us to the east wall of the nave, where we have on its northern half "CHRIST AMONG THE DOCTORS." A well-preserved range of pendent circular arches forms a canopy, underneath which are the various actors in the scene. Joseph and Mary, and perhaps the Child, are on the left, the doctors on the right. There are some curious details of costume and architecture which would repay careful study. In all the foregoing scenes there are slight indications of lettering upon the broad red bands framing the pictures, but the words of the hexameters are quite undecipherable.

Over the chancel arch was a circular medallion which no doubt contained "THE HOLY LAMB," but this has been destroyed. At Plumpton the Lamb was painted on the soffit of the chancel arch; and the same subject, similarly placed to the Hardham painting, was to be seen at Westmeston,¹ but in that case the Lamb was placed within a curious irregular quatrefoil, bordered with zigzag ornamentation.²

¹ *Sussex Archaeological Collections*, XVI. Plate opp. p. 8. Also, perhaps, at Maresfield, Sussex, where there are said to have been found in 1838 "on each side of the chancel arch, two angels with expanded wings, the right arm of one and the left of the other being so extended as to hold in their hands a chaplet of flowers just over this point. In their other hands were palm branches. These figures were about 8 feet in length." Together with other ancient paintings discovered at this time, "they were covered up again" (*Sussex Archaeological Collections*, XIV. 143). The Agnus Dei is found painted over the chancel arch of the church of Vie, in the Department of Indre-et-Loire, work of the first half of the twelfth century; also in a like position, accompanied by censuring angels, in the chapel of the ancient abbey of St. Chef, Isère, France.

² The quatrefoil, as an ornament borrowed from a constructional source, is frequently found in illuminations of the tenth, eleventh, and twelfth centuries (e.g. in the Benedictional of St. Æthelwold, c. 970, Cædmon's Paraphrase, c. 1000, and the Missal of Robert of Jumièges, c. 1045); or, what is the same thing, the *half-quatrefoil*, to form a trefoil arch (see the Missal of Robert of Jumièges and the Bayeux Tapestry). A quatrefoil opening in a gable occurs in an eleventh century MS., Cott. Claud., B. IV. I discovered an eleventh century consecration cross beneath the remains of twelfth or thirteenth century paintings in the restoration of Ford Church, Sussex. It was painted as a plain cross within a quatrefoil in the same varnish-coated medium as that in which the Hardham and Westmeston paintings were executed.

In the latter painting angels were represented as holding up the medallion with its sacred symbol, and averting their eyes from the splendour of the Divine radiance; but here they show their reverence by the crouching posture in which they kneel. The angel on the northern side is almost entirely destroyed, but that to the south is more perfect, the costume especially being very distinct and brilliant (see Plate III.). There is something very uncommon about the colours and cut of the dress. The nimbus is emerald green, the angel's hair being yellow, parted in the middle. The costume consists of a white, close-fitting tunic, reaching to the knee and having bell-mouth sleeves, one of which is pink, the other white with a pink border; and an undertunic of deep red. There is a curious edging of pink, red, and white, like bits of cloth sewn on the hem of the upper tunic, which occurs in several other figures and was a common feature in the Westmeston paintings.¹ The upper tunic on a close inspection still shows the delicate spiral lines in pale brown—to indicate folds in a silken vesture—traced by the artist when the ground colour was wet.

The angel's wings are white and red, the feathering of a peculiar palm-like character. He holds a golden censer. Behind the figure is a diaper background and red dado; below is a rich yellow pavement—all as in the adjoining scene of "The Annunciation." The lower part of the figure, together with all the painting bordering the chancel arch, was ignorantly destroyed when the plaster was removed, to "show the stonework"! Most probably among the work thus destroyed, on the soffit of the arch, were "THE SIGNS OF THE ZODIAC"; and perhaps on the reveals of the arch-piers "THE OCCUPATIONS OF THE MONTHS."² Very imperfect fragments

¹ Parti-coloured clothes were shown on some of the figures at Westmeston, e.g. one leg pink, the other white.

² Both these were favourite subjects with Romanesque sculptors and painters. The Signs of the Zodiac appear on many Norman doorways (e.g. St. Margaret's, York, and Ifley, Oxfordshire); they occur also on the late twelfth century

painted ceiling of Peterborough Cathedral, and in the charming stone marquetry pavement of like date in the Trinity Chapel, Canterbury Cathedral. The occupations of the months are represented on the curiously carved medallions round the outer order of the south door at Barfreston Church, Kent. The Signs of the Zodiac were painted on the

of medallions such as may have enclosed the latter subjects still remain on the western face of the arch (south side).

We now come to the subjects in the lower tier of the nave.

That on the north of the chancel arch is too much defaced to make out. Probably it represented "THE CIRCUMCISION OF CHRIST"; for the opposite subject (south side) is "THE BAPTISM OF OUR LORD." Though very imperfect, it is possible to trace the figure of the Saviour with cruciform nimbus, standing in the water (shown as a sort of conical-shaped fountain), the Dove descending on Him, and the Baptist pouring water on His head. A circular enclosing arch, diaper and masonry patterns, make the setting of this subject.

The only subject remaining in anything like a perfect state in the lower tier of the south wall is to the west of the large inserted window. This is "THE LATTER END OF THE RIGHTEOUS" and perhaps formed part of a series of "Moralities" founded upon the parable of Dives and Lazarus. If so, "THE RICH MAN FEASTING" probably occupied the eastern part of this wall, now nearly all taken up by the fifteenth century window, while the companion picture to that we are considering "THE LATTER END OF THE WICKED" of which there is no certain trace remaining, would have been placed somewhere to the west, in proximity to "The Torments of Hell" on the west wall.

Lazarus is shown as a small naked figure carried in a cloth or napkin by four large angels, two above and two below, to Abraham's bosom. The angels' wings are outstretched and go beyond the limits of the picture, passing through a very boldly drawn border of conventional clouds. On the left is a domed tower with some arcading similar to that in the picture of "The Annunciation," while a pair of smaller arcaded turrets with sharply pointed tiled roofs flank the subject on the right. Whether either of these bits of architecture is

soffit of the chancel arch at Westmeston and also at Copford, Essex, and Kempey, Gloucestershire, in the same position.

They occur in the eleventh century paintings at the church of St. Savin, Poitou, France.

intended for the rich man's house, or for the heavenly city, does not seem certain. In the wide red band above are the very faint remains of an inscription in white lettering PAVPER Obiit.

The paintings in the lower tier of the north wall of the nave have been, most regrettably, destroyed for the most part by the modern doorway and a widely splayed thirteenth century lancet. Had they been more perfect we might have had in this group very valuable evidence as to the date of the entire series. As it is, however, there is very strong probability that the whole of this lower tier as far as to the chancel arch was occupied by incidents in the legendary history of St. George.

My friend Mr. J. Lewis André—than whom none can speak with greater authority on such questions—endorses my opinion in this matter, although originally disposed to assign a purely emblematical meaning (such as "The Christian Warrior triumphing over his Enemies") to the first subject. (Plate IV., *ante*.)

I have called this "ST. GEORGE COMING TO THE AID OF THE CHRISTIANS AT ANTIOCH." A nimbed figure of youthful aspect, clad in a pink or red tunic, with upper vest open at the neck, and mounted on a large white horse, is charging a confused group of armed figures, who are in various attitudes indicating discomfiture, one or two being apparently dead, and another doubled up with the thrust of the Saint's lance. This lance carries at the opposite end a four-tailed pennon, strikingly similar to those shown in the Bayeux Tapestry and early twelfth century seals. The high-cruppered saddle bears a strong resemblance to the saddles figured in the same works; while one or two kite-shaped shields—white, with a red border, and *umbo*—are added evidence of date. These shields are a familiar feature of the Bayeux Tapestry, and do not seem to have been retained in that shape much beyond the first quarter of the twelfth century. The discomfited paynims appear to be wearing the conical steel cap and nasal, also associated distinctively with this period. Both in composition and details this subject is strikingly similar to the remarkable bas-relief of St. George on the head of a twelfth century doorway at

Fordington Church, Dorset. The pennon in this has but three tails, and it shows, what is not now to be seen at Hardham, a small Latin cross in the field, and a row of crosses as pendant ornaments on the horse's harness. The Saint in both representations is reining in his charger and thrusting down the struggling figure of a heathen warrior with the butt end of his lance, while other dead and doubled-up paynims attest his supernatural prowess. In his rear at Fordington are two Christian knights kneeling with hands uplifted in reverential wonderment at this signal act of divine interposition; but I cannot find any certain trace of these in the mutilated Hardham painting.¹ A piece of architecture (? the city of Antioch) serves to divide this subject from the next.

This (Plate IV.) has unhappily been so mutilated by the modern doorway that it is impossible to do more than guess at its meaning. A nimbed figure, throwing up his hands, is being held by two others who have seized him by the wrists; at his feet is a large kite-shaped shield. I think it possible that we have here an incident in the legendary life of St. George—his being seized and carried before Datian the pro-consul for tearing down the Emperor Diocletian's proclamation against the Christians.

The rest of the lower tier of this north wall is a blank, except for the faint traces of a wheel, with a figure apparently bound to it. This again, may be part of the story of St. George (which thus would have occupied the whole of the lower tier of this wall); for we know that after enduring other cruel tortures for eight days, and having drunk unharmed of a poisoned cup, the Saint was, on the decree of Datian, "bound upon a

¹ Both Christians and paynims at Fordington closely resemble the warriors of the Bayeux Tapestry. They have conical helmets with nasals, and close-fitting suits of apparently ring mail, the whole suit in one from the head to below the knee. Arms and legs are encased in this armour. It is impossible to understand how the wearer got into, and still more, out of, these

"combination" suits of mail, unless they were fastened up the back. The foundation of these suits of mail was canvas or leather with discs of metal sewn on, or between two thicknesses of the same. The quilted brigandines of the bowmen and arquebusiers of the sixteenth century were the last survivals of this form of defensive armour.

wheel full of sharp blades; but the wheel was broken by two angels who descended from heaven."¹

My conjecture as to the meaning of these paintings is strengthened by two considerations: (1) That in a will of 1537 a bequest is made "To Saynt George's light at Hardham."² This makes it certain that there was at that date an altar, image, or picture of the Saint—perhaps all of them—in the nave of the church. (2) That in the strikingly similar Westmeston paintings there was a martyrology—also on the north wall of the nave (on which wall St. George, like St. Christopher, seems to have been most commonly painted)—which almost certainly was that of St. George. In the account of these particular paintings in the *Sussex Archaeological Collections*, they are ascribed to the history of another saint and martyr, St. Vincent, but, as I think, without sufficient evidence—without any at all, indeed, excepting that the words DATIANO RÉGI were found in white letters on a band above the central subject, and · DATIANVS · appeared on the ground of the painting to indicate a crowned figure with a sword uplifted in his left hand. This figure was shown seated, in the act of pronouncing sentence, his right hand being raised to emphasise his words.³ Behind him, and staying with upraised hands the blade of the sword, was another figure, evidently intended for the magician who had prepared the poisoned cup, while in front was the wall of a circular tower. Also, above this scene was another which is said to have conveyed "the idea of a battle or struggle," as heads were depicted rolling on the earth. This might well have been the battle scene at Antioch. The same pro-consul Datian figures in the legend of St. Vincent as well as in that of St. George, but without distinct evidence to the contrary, we may safely conclude that it was the latter whose history adorned the walls at Westmeston; and this conclusion adds weight to the

¹ Mrs. Jameson's *Sacred and Legendary Art*, II, 400.

² *Sussex Archaeological Collections*, XII, 93. In the paper read at the same meeting of the Royal Archaeological Institute as this, Dr. Cox gave several instances of bequests to lights before pictures of saints.

³ Datian's crown was of a very early type, three fleurs-de-lys on a hoop of metal, very similar to the crown of Edward the Confessor in the Bayeux Tapestry. His dark red dress was spotted with the three white pellets which occur so frequently at Hardham.

probability that the identically situated paintings at Hardham were also in honour of England's patron saint.

Now the date of the siege of Antioch, at which St. George is supposed to have come to the succour of Godfrey de Bouillon and the Christians (1098) makes it certain that the representation of the incident (and with it the other paintings) at Hardham *cannot be older* than the close of the eleventh century, while in all probability a little time would elapse for the miraculous intervention to become noised abroad sufficiently to get painted on a church wall. On the other hand, the style of the paintings, *per se*, is so archaic and peculiar, so much earlier in character than most of the well authenticated examples of twelfth century decorative art that have come down to us, that we might well be inclined to put them within the latter half of the eleventh century. The conclusion, therefore, that we may safely come to is that they belong to the early years of the twelfth century, and this is borne out by the details of the chancel paintings, which we will now consider.

The chancel walls, though less lofty than the nave, are similarly decorated in two tiers of paintings, the scheme of which seems to have been founded upon the two ideas of "The Fall and the Regeneration."

On the southern half of the west wall, back to back with "The Annunciation" on the nave side of the arch, is the well-preserved representation of "ADAM AND EVE." This particular painting (Plate V.) is treated in imitation of a piece of tapestry, being hung by loops to a rod which is supported by hooks from the wall. The details and colouring are noteworthy. Adam and Eve are *in puris naturalibus*, their bodies being painted a warm flesh tint with high lights of white and streaks of pink, the outlines and features being accentuated in dark red. Adam's hair is red, Eve's yellow; their eyes brown. The drawing of the figures, though archaic and conventional, is free and vigorous compared with contemporary native work of like kind. Indeed, the whole treatment betrays a foreign influence; and the artist, or body of artists, was possessed of no mean skill for the time at which the paintings were executed.

Our first parents stand against a pale blue background which shades off into white, and Eve is shown in the act of receiving the forbidden fruit which the serpent appears to have plucked and is dropping out of his jaws into her outstretched left hand, while with the long and curly forefinger of her right hand she is pointing over her shoulder at him. Adam seems to be pointing with his right hand at a piece of the fruit in his left; but he may be merely emphasising his speech with his hands. There is an appropriately conspirator-like air about the two.

The background of the serpent is a hot tomato-red, the only touch of this colour in the church, and upon this is painted the Tree of Knowledge, in the branches of which the serpent is coiled. "Coiled," perhaps, hardly expresses the attitude of the upper part of the body, which is furnished with large wings and feet, and rests in a fork of the tree, the serpentine hinder part being twisted in knots round the tree. The head presents a mixture of dog and serpent with a peculiarly evil look about the red eye. The body and wings are of a brownish yellow, relieved with pink and white shading and darker brown outlines. The effect of the creases in the worm-like skin is rendered by cross lines of white and pink. From the branches of the tree depend waving tendrils, on which are emerald green fruits similar to the one that Eve holds in her hand; while along the right-hand border of the picture are more branches with curious white flowers thereon. The very unusual and foreign character of these led me to search for anything similar in early art; and I was fortunate in lighting upon something almost identical in the recently published *magnum opus* of MM. Gélis-Didot and Laffillée.¹ In this splendidly illustrated and scholarly work—would that we had a similar treatise dealing with our English mural paintings!—the first of the coloured plates and descriptions are taken up with the unique series of eleventh and twelfth century paintings covering the entire church of St. Savin, in the

¹ *La Peinture décorative en France du XI^e au XII^e Siècle.*

Department of Vienne, South-West France.¹ In one of the earliest groups (in the west porch) are rows of angels falling down in adoration before a central Majesty ; and under their feet are springing up delicate little flowers on wavy stalks, precisely similar in shape to those in this painting of the fall at Hardham ; and they also occur in another painting of the same date in the nave. In this latter, a vision from the Apocalypse, are other details displaying great similarity to the Hardham paintings, such as a winged dragon-serpent. Inscriptions in white lettering, as at Hardham and Westmeston, are placed on bands of dark colour over the different pictures. Most of them are no longer legible, but the letters that remain are of the same Roman type.

It is remarkable that in these paintings at St. Savin the standard of art in general composition, figure drawing, and ornament is quite classical in its excellence, and is, if anything, superior to similar work of the succeeding twelfth century in the same church and elsewhere in France.² And the standard thus set up may have produced a school whose traditions, models, and even guilds of workmen would before long penetrate even to remote Sussex. The paintings at Hardham look humble and rude by comparison, but one sees a master-tradition and here and there a master's *touch* which proclaim a noble parentage.

But to return. On the northern half of the west wall of the chancel the painting is very indistinct, and so much mutilated that I find it difficult to interpret the subject. A little figure waving a branch of a tree, and a beast that *may* be the Leviathan, together with some diaper-work, are all that can be distinguished. Probably this subject has some connection with the preceding.

¹ This church was monastic (Benedictine), and was rebuilt in the eleventh century, the greater part after 1050, and the paintings are for the most part coeval. M. Paul Mérimée, an eminent authority, tells us that they go back to the second half, or to the end, of the eleventh century. A descriptive account, with excellent illustrations, of this church, by Mr. H. C. Corlette, A.R.I.B.A.,

appeared in *The Architectural Review* for August, 1897.

² The authors of the monumental work on French decorative painting above referred to say : "Some pictures can be placed in the rank of *chefs d'œuvre* ; we may instance, among others, that where the Lord launches the worlds into space." And these were executed in the barbarous eleventh century !

But little of the detail of the remaining pictures in the chancel can be made out. The disturbance of the south and east walls caused by the inserted windows has wrought great havoc, and time, the weather, and injudicious scraping have aided in obliterating what was left. Rows of saints under canopies—perhaps the Apostles and others—appear to have occupied the western part of the upper tier on both north and south walls. Some seem to have had green, others yellow, nimbuses of the oval shape found in “The Annunciation,” and verses accompanied the pictures. Below one of these rows, on the north wall, is “THE LAST SUPPER.” Our Lord can be distinguished by the cruciform nimbus; St. John leans on his breast; the usual dishes, fish, loaves, chalice, and paten appear on the table. One of the loaves is marked with a cross. The opposite lower tier painting is too far gone even to guess at.

Eastward in the upper tier on both sides, and continuing along the east wall, is seen the vision of “THE WORSHIP IN HEAVEN,” originally leading up to a central Majesty, but this has been destroyed by the thirteenth century window. All that remain are parts of the four living creatures and the twenty-four elders. The former are very faint; wings and halos are barely visible.

The elders are seated on thrones and have a pavement under their feet similar to that in “The Annunciation.” They have crowns of a very early type—something like a low mitre¹—and are represented as “falling down before the throne,” all in the same stiff attitude. They hold a vial in their right hand, and a gittern,² or guitar, in their left,

¹ The Magi in a painting in the church of Vic, Indre-et-Loire (date 1080–1100), have exactly similar crowns, the idea of which was a square metal cap, i.e. formed of four straight sides without a top covering. Viollet-le-Duc gives a drawing of one under the article “Couronne” (*Dictionnaire du Mobilier Français*), taken from the eleventh century paintings of the west porch, St. Savin. He remarks on the discomfort of a square headdress. Such a form of crown was in use between 1050 and 1150.

² Here, again, is a very early note. The gittern is found, instead of the harp, in painted or sculptured representations of the twenty-four elders of

eleventh and early twelfth century date, and is also met with in contemporary illuminations. I cannot cite an English example to parallel this Hardham treatment in painting or sculpture, but in some of the early illuminations in our libraries, the gittern is to be seen in the hands of the Apocalyptic elders. Zithern (*cithara*, French), gittern (French, *guiterne*), guitar, are all derived from one word—the Greek *κιθάρα*; and in like manner the instruments bearing these names were evolved one from another, the harp being the original of all. What is translated “harp” in Rev. V. of our Authorised Version is rendered *cithara* in the Latin of the Vulgate.

and appear to be vested in long tunics or albes. Their faces are of the same curiously hard type that we find in "The Annunciation" and other subjects. Beneath is a broad red band on which are traces of a verse—perhaps one of the choruses in the Apocalypse.

In the lower tier of this eastern part of the chancel, under the remains of canopy work, are groups of figures, not all of whom are nimbed. It is possible therefore that these are not connected with the Majesty, but represent scenes in the life of our Lord.

I have gone at some length into the description of these paintings, as I believe them, imperfect as they are, to be of quite exceptional importance and interest, on account of their extent and very early date. One rarely finds a church, however small, covered with paintings all of one scheme and period; and when that period is the earliest of which we have any examples—that embracing the second half of the eleventh to the first quarter of the twelfth century—one may be excused for going somewhat minutely into detail in describing them.

My friend Mr. C. R. Peers calls this period "the Saxon overlap," and it seems a very good term to express an era of conflicting traditions in art such as that which ushered in the Conquest and subjugation of England; but it must not be understood that the dominating influence in these paintings was a native one. The number of distinct marks of early date which I have been at some pains in emphasising, taken in conjunction with the general aspect of the paintings, will, I think, warrant my claiming for them a date not long after the year 1100; and they might with equal propriety have been placed within the latter part of the previous century, but for the practical certainty that "The Appearance of St. George at Antioch" is among the paintings. This limits the date to a period after 1098, but, as I have endeavoured to show, *very soon after*; and it suggests the contemporary acceptance and widespread belief of the story.

The curious similarity of the paintings at Hardham, Westmeston, and Plumpton to eleventh and early twelfth century work in Western France seems to point to their being the work of a travelling guild who had inherited

the traditions of the school of painters of Poitou, and blended them with English ideas.

The peculiarities that we notice in the Hardham paintings are certainly not the result of pure Saxon influence, for in the treatment of the faces and draperies of the figures there is little trace of the mannerisms familiar to us in Saxon illuminated MSS. ; at the same time this group of paintings bears very slight resemblance to the few remaining typical Anglo-Norman paintings scattered about England.¹

On the other hand, a strong foreign influence is observable in this group of paintings—an inherited classical tradition, filtered in succession through Byzantine, Lombardic, and Frankish channels, and finally but imperfectly blended with native Saxon and Norman Romanesque. The very colours are un-English-looking.² In the weirdly tall and angular figures Byzantine feeling is very apparent. Much of the architectural detail is quite Italian in spirit; while the French influence grafted upon these strains is very noticeable in some of the special points dwelt on above. The workmen may have been English, but they received their training abroad; and it is evident that they were touched with the crusading spirit—perhaps some of them may even have newly returned from the First Crusade, their minds stored with the wonders of the East and the glories of foreign lands.

Until the settlement of England after the Conquest, and while as yet the dominant Norman ecclesiastics had found little opportunity to train up in their own art-traditions schools of craftsmen and painters, it seems

¹ *E.g.* Binsted Church, Sussex, not far from Hardham (c. 1140); West Chiltington, also near (c. 1170); Kempsey, Gloucestershire (c. 1130); St. Gabriel's Chapel in the crypt, Canterbury Cathedral (c. 1150). All these, and others that we could name, have a certain family likeness to each other, but the Hardham group have little in common with any of them. I have elsewhere indicated a half-belief that Clayton Church should be added to this group. One of the Binsted paintings forms a coloured plate in *Sussex*

Archæological Collections, XLIII, 224; Kempey, with a coloured illustration, is described by Mr. Micklethwaite in Vol. XLVII, of the *Archæologia*, p. 187; and the Canterbury paintings, elaborately illustrated, by the late Canon Scott Robertson in *Archæologia Cantiana*, XIII, 17.

² They are found in the eleventh century paintings at St. Savin; a deep purplish red, with other shades, a strong golden yellow, yellow-brown, a brilliant green, blue, white, and black.

very probable that the need for skilled artists was supplied from abroad, as was often the case during the previous centuries of Saxon rule.

The great Cluniac priory of St. Pancras, Lewes, founded by William de Warrenne and his wife Gundrada about 1077, must alone have been the cause of importing a host of foreign artificers.¹ Its great stone church, replacing the Saxon wooden one, was consecrated in the first instance between 1091-97; but thereafter work was busily and continuously going on.

Now the church of Westmeston has been conjectured on what seems good evidence to have come into the possession of Lewes Priory²; but apart from this, both Westmeston and Plumpton (and Clayton) were among the lands of William de Warrenne, a man of singularly cultured taste for his time, a great traveller and patron of the arts; in which latter rôle his sons continued to act as benefactors to the priory. After the death of William, in 1088, they proceeded with the building of the church and its offices, and much of the elaborate colour decoration (of which abundant traces have come to light during the recent excavations on the site of the infirmary chapel) may have been carried out in their time. Meanwhile Hardham was in the possession of other Norman lords, who emulated the great de Warrenne in benefactions to the church.

We have, it seems to me, in these facts suggestive evidence as to when and by whom the Westmeston and Plumpton paintings were executed, and, arguing by analogy, confirmatory evidence as to the date and artistic genesis of the paintings in Hardham Church.

In conclusion, the grateful task remains of expressing my indebtedness to the Sussex Archæological Society for bearing the actual cost of the scaffolding, sizing, and varnishing for the paintings; to the Rector of Hardham,

¹ The pious patrons had a strongly marked partiality for Burgundian monks, with whom the community at Lewes was judiciously leavened. The peculiar expression on Gundrada's tomb (now in Southover Church), is supposed to refer to this: "Intulit ecclesiis Anglorum balsama morum." Probably with the monks came skilled workmen and

artists—indeed, many of them were doubtless artists themselves. Archbishop Lanfranc, the adviser of William and Gundrada, himself a foreigner, despised the English as barbarians, and recommended foreigners.

² *Sussex Archæological Collections* XVI, 18.

the Rev. Cecil Brereton, for much kind assistance rendered; and to the Hon. Photographer of the Sussex Archæological Society, Mr. J. C. Stenning, whose excellent photographs, specially taken, have greatly helped me in elucidating some of the details of the paintings. My thanks are also due to the Editors of the *Archæological Journal* and *Sussex Archæological Collections* for their kindly criticism.

CURRENT ARCHÆOLOGY.

A FIND OF BRONZE IMPLEMENTS NEAR BRISTOL.

Some interesting ancient bronze implements were found by a boy in the picturesque little valley known as Combe Dingle, about four miles north-west of Bristol. The find consisted of a bronze chisel and three ornamented flanged celts,¹ varying from $5\frac{2}{3}$ inches to $3\frac{7}{8}$ inches in length, and from $13\frac{1}{4}$ oz. to $4\frac{3}{4}$ oz. in weight. The smallest was beautifully decorated with a pattern formed of diamond shaped markings shaded with crossed lines, enclosed in a similarly shaded shovel-shaped frame, with double zigzag lines on either side. It somewhat resembled one figured by Sir John Evans from the Isle of Lewis, but was much smaller. The most interesting object in the hoard was a chisel-like implement $6\frac{1}{4}$ inches long, which seems to belong to an undescribed type. Sir John Evans, to whom a sketch was sent, wrote :—"I do not remember anything like the tool. It is of the same class as Figs. 196 and 197 in *Ancient Bronze Implements*, but the point is more like that of Fig. 220. I doubt whether it was used to extract cores" (the suggested use of those figured in Sir John's book) "as the celts belong I believe to an age when coring was unknown." With the implements was found a curious looking stone ball, of extremely hard nature, which Mr. Gowland, F.S.A., found on analysis to consist of iron ore (hematite); it seems to have been buried with the tools, probably as a curiosity, not showing any traces of use as a stone hammer. The bronzes are now in the possession of the Rev. S. N. Tebbs, of Westbury-upon-Trym.

CAERWENT.

The excavation of the remains of the Roman town of Isca Silurum, commenced in 1899 under the direction of

¹ Similar to Fig. 14 on p. 53 of *plements, etc. of Great Britain and Ireland.*
Sir John Evans's *Ancient Bronze Im-*

a Committee of which Lord Tredegar is President, was continued during the summer and autumn of last year, and has resulted in the discovery of the remains of no less than six blocks or houses, of which only two have so far been completely explored. Of these "Block I" consisted of two rooms only, and an annexe supposed to be a latrine; in one of the rooms were remains of two furnaces of unusual construction, evidently for some trade or manufacture. "Block II," a large and important building, has not yet been completely excavated, but will be finished when work is resumed in the spring; several tessellated pavements and other interesting features have been found, which will have to be dealt with. The most interesting building is that named "Block III," a house of most unusual type, if not unique in England. It consists of no less than sixteen rooms, mostly of small size, grouped round a courtyard or peristyle, which was open to the air in the centre. The ambulatory was paved with red *tesserae*, and covered by a lean-to roof of stone slates supported on ten columns, of which fragments both of shafts and capitals were found. On the east side was a corridor running the whole depth of the building, and separating it from the street. The remains of a very large latrine on the south of the house were well preserved, and resemble one found in Hadrian's Villa near Rome.

The city walls are in very excellent condition, nearly a mile in circuit, and from 20 to 30 feet high. The small portions that have at present been explored, have revealed some very interesting features, but as it is intended to continue the examination of both the south and west walls shortly, no account of them will be given at present. The same may be said of the city gates, of which one, on the north, has been partially excavated. Numerous coins and small antiquities have been found, and are deposited in the local Museum. Among these may be mentioned a slab of stone with a portion of a well-cut inscription, a dagger of unusual type with a bone hilt, a sickle, bill-hook, knives, choppers, and various other objects of iron; bronze *fibulae*, buckles, pins, rings, etc.; three engraved gems from rings, a bone charm against the Evil Eye (in the shape

of a hand), and a very considerable quantity of painted wall-plaster, some of which still remained *in situ* to a height of 3 or 4 feet from the base of the wall. The Committee hope shortly to publish their first Report, containing an account of Blocks I and III, to be followed by an account of Block II, and of the south-western portion of the city wall. The Treasurer, Mr. Alfred Hudd, F.S.A., Clifton, Bristol, will be glad to receive contributions to the Exploration Fund, which are greatly needed.

RECENT EXCAVATIONS IN HERTFORDSHIRE.—RADLETT.

In December, 1898, a Romano-British potter's kiln was opened at Radlett, on the property of Sir Walter Phillimore, by Mr. W. Page, F.S.A. A small kiln was discovered in a sand pit, but was unfortunately destroyed, the workmen mistaking it for an old land drain. Sufficient, however, was left to show that it was similar to the kiln illustrated on Plate XXXVII, Fig. 3, or Mr. Charles Roach Smith's *Collectanea Antiqua*, Vol. VI. The second and larger kiln was found about 10 feet from the smaller. It was somewhat in the shape of a horseshoe, 6 feet at its greatest length inside and 5 feet 1 inch at its greatest width. It had a batter on the inside varying from 6 to 10 inches. The uppermost part existing was 3 feet 6 inches from the present ground level and about 1 foot 6 inches from the ground level of the Romano-British period. The kiln had evidently been constructed by cutting a hole in the sand, about 4 feet in depth, of the shape which it was to take, and against the sand there was built the wall of the kiln, consisting of small pieces of Roman bricks, varying in size, and set in clay, which was afterwards baked, making one solid piece of wall about 6 inches in thickness. The most interesting point with regard to these kilns is the fact that it was found possible to identify the name of the potter who worked there. This could be done from the large quantity of the impressions of his stamps, of which there were three varieties, all bearing the name *CASTUS*, upon the rims of *mortaria*.

Most of the pottery found is now by the kindness of

Sir Walter Phillimore preserved in the Hertfordshire County Museum, at St. Albans. For a full account of this discovery see *Proc. Soc. Antiq.*, XVII, No. II, 261.

VERULAMIUM.

In the autumn of 1898, Mr. W. Page commenced some excavations in the glebe of St. Michael's vicarage, by kind permission and with the assistance of the Rev. C. V. Bicknell, the vicar, on the site of a large Romano-British building in Verulamium. A long wall 373 feet in length was opened, at each end of which were two walls 26 feet apart, evidently formerly an ambulatory, the inner walls of which showed the foundation for columns giving an inter-columniation of 13 feet 6 inches centre to centre. Connecting the ends of these ambulatories was the long wall above referred to, which was extremely massive, and was broken by two openings filled by a colonnade of five columns of peculiar construction. One of the bases of these columns remained; it was circular, 2 feet 10 inches in diameter, and was composed of Roman bricks triangular in shape, with one side curved to form the outside. A portion of a fluted column of the same diameter was also found. From the excavations, which were continued in the autumn of 1899, it appeared that this wall was the inner wall of a long ambulatory, 26 feet in width, backing upon which at the east end were a series of passages with coarse red tessellated floor 83 feet in length, and a large chamber 63 feet 9 inches in length, and 34 feet 6 inches in width internally, at the south end of which was an apse 17 feet across externally, and 26 feet in width, forming a platform 4 feet 8 inches above the floor of the chamber. The side walls of the chamber are of excellent construction, being as much as 9 feet 6 inches in thickness, and terminate with pilasters, the foundations of which are 5 feet by 4 feet, and are opposite to the similar foundations in the wall uncovered in the previous winter. These walls and that at the south end, all of which remain to a height of 2 feet and more above the floor level, were covered with plaster with the usual roll at the junction of the wall and floor. So far as the plaster remained in position

it was coloured a dark olive green, but detached pieces of it were found of various colours, and with fragments of designs upon them. Mr. G. E. Fox, F.S.A., suggests that having regard to the thickness of the walls, the chamber was vaulted, and probably with a barrel vault. Of this there was every appearance, for firstly, there were found three pieces of coloured wall plaster, the surfaces of which were very slightly concave, and which had possibly formed portions of the internal decoration of the vault; secondly, while on the floor of the ambulatory, and at the sides of the apse there was a layer of charcoal indicating the remains of a burnt wooden roof, in the chamber itself scarcely any charcoal was found; and, thirdly, the floor of the middle part of the chamber was mostly destroyed by bricks and flints which had evidently fallen from some height and had become embedded in the pavement in their fall.

There can have been no entrance to the chamber from the east, south, or west side, as there is apparently no opening in the walls, which, as before stated, remain to some height above the floor level. On the north side, however, the wall has been destroyed down to a foot below this level, and from the smoothness of its upper surface Mr. Page is inclined to think it formed a bed for a continuous course of blocks of stone, and was merely a sleeper wall to carry columns. This is corroborated to a certain extent by the fact that the eastern side wall passes quite over it, and by the finding of a considerable number of the triangular tiles with one side curved, used as before stated in the construction of the columns. On the other hand, however, as there was a slight projection of 4 inches on the west side at the end of the east wall, 8 feet westward of which there was a small block of masonry, with a slight indication of a face on its eastern side, the space between these points may have formed a doorway, but the remains were so slight that it is impossible to make any definite statement, beyond pointing out that for the reasons before stated the entrance to the chamber must have been at the northern end.

The chamber had a tessellated floor, so far as could be ascertained, of an elaborate design. The pavement had

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an outer border of coarse drab *tesserae*, each *tessera* about 1 inch by $1\frac{1}{4}$ inch, which extends from the side walls about 5 feet 6 inches, and rather more from the end walls. Within this was a border of a scale pattern in black and white, within which again was a very pretty wide braidwork design in black, red, drab, and white, then lines in black and white. The great depth of soil above the floor level, about 5 feet to 6 feet, prevented the uncovering of very much of the pavement, but it appeared that it was very fragmentary, by reason of the upper part of the building having fallen and become embedded in its surface. From what was found, however, the design appeared to be geometric, made up of a series of bands of a scroll pattern in red, white, yellow, and black. The foundations for the tessellated pavements were composed firstly of about a foot of rammed gravel, upon which were about 2 inches of rough concrete or rammed gravel mixed with lime, then came about an inch of *opus signinum*, upon which again was a thin layer of white cement forming a bed for the *tesserae*.

For full reports upon these excavations so far as they have been carried, see *Transactions of the St. Albans and Herts Arch. Soc.* for 1899–1900.

THE MARTIN EFFIGY IN PIDDLTOWN CHURCH, DORSET.

In Vol. LV. of the *Archæological Journal*, at p. 119, is an account of this alabaster figure by Viscount Dillon, P.S.A., in which it is stated that the person represented was one of the Martin family, who was living in the time of Edward IV., but whose name had not, as yet, been identified, though a pedigree of the family would doubtless easily settle the point.

This has now been done, by the researches of the Rev. J. K. Floyer, and communicated to the *Journal* by Viscount Dillon. The effigy is proved to be that of Sir William Martin, who died in 1504, and is described in his will, dated 1503, as a Knight of the Bath. He directs that his body should be buried in the chapel of St. Mary Magdalen, Piddletown, in a place prepared for it. He married 1st, Isabel, daughter and heiress of Thomas

Ferendon, from whom he had Tincleton and other adjoining lands, and 2nd, Christian, daughter of Sir Amyas Paulet of Hinton St. George.

The tomb and effigy were therefore prepared nearly thirty years before the death of the person they commemorate, as both the details of the armour and the collar of suns and roses show. Viscount Dillon remarks that this collar would not have been carved later than the reign of Edward IV., or, with a white boar pendant, than that of Richard III.

ROMSEY ABBEY, HANTS.

In October and November, 1900, during the process of laying down a wood block floor in the nave and crossing of Romsey Abbey, the foundations of an apse were discovered under the central tower, and considerable remains of walls on the south side of the nave. The latter may be dealt with first, as they have no bearing on the structural history of the church, and the record of them is chiefly of value because they are now buried beneath 6 inches of concrete and a wood block floor, and will probably not be seen again for many years. They are of two dates, the wall running east and west being the older. This is 19 inches thick, of flint and stone rubble, and was traced from the eastern angle of the first nave pier to within 2 feet of the fourth, where it ends without a return. It is plastered on the north or inner face with a coat of rough yellowish plaster, continuous with a floor of the same character, 16 inches below the present pavement level, which is at the original level of that of the existing Norman nave. This plaster floor rests, as to its western part, on a layer of flints on the undisturbed soil, and extends along the whole length of the wall from east to west, and northwards as far as the digging went, that is, nearly to the south edge of the paving of the central alley of the nave. It is worked to a rough trowelled face, and was not intended to be exposed, being clearly the floor of the pit for the stalls, of which the rubble wall formed the southern side. The pit is of unusual width, and suggests that there must have been a wooden floor over the whole area of the stalls. The second wall, which runs north and south at right

angles to the first, is very roughly built, about 3 feet thick, and rests on the plaster floor just described. At about 8 feet from its junction with the first wall is a projection 2 feet 6 inches square, which is not the start of a return, as the wall continues northward beyond it. All the area to the east, as far as it was examined, has 8 inches of gravel concrete laid on the first plaster floor, and on that a second plaster floor very similar to the first. On this lies a layer of rubbish, chiefly bits of wood, carbonized by the damp, so that at first sight it looks like traces of a fire, which however is clearly not the case. Another coat of plaster has been put down over the rubbish, probably at no great interval from the laying of the second floor. It is further to be noted that the engaged shafts on the north faces of the second and third piers of the nave are in their lower part of new stone, the original shafts having doubtless been cut away for the backs of stalls. From all this it is clear that stalls extended into the fourth bay of the nave, and were subsequently shortened or moved eastward, the level of the floor of the pit being then raised 9 inches. The bits of wood are the carpenters' rubbish from the making of the second set of stalls. There is little evidence as to the date of all this. A few pieces of the early Norman stonework are used up in the first wall, and among the rubbish lying on the second plaster floor were found several pieces of plain yellow, green, and pale blue glass, of fourteenth century date. The first wall may be of the thirteenth century, and the second a hundred to a hundred and fifty years later.

Turning now to the foundations of an apse east of the western piers of the crossing. The wall exists to within 7 inches of the present floor level in its northern portion, the east end was not uncovered, and the southern part was damaged by the workmen, who removed several stones before realising that they had come on part of a wall. One course of ashlar remains on the northern part, on the outer and inner faces alike, set in a fine lime mortar of a slightly reddish colour. At this level the wall is 4 feet 9 inches thick, and from the ashlar downwards is built of flint rubble in a grout of poorish brown mortar. A little Roman material is used, a nearly complete brick 11 inches square by $1\frac{1}{2}$ inches thick being found in the footings on

the inner side, and several blocks of oolite with Roman mortar on them. On the outer face the base of the wall was not uncovered at 4 feet 1 inch below the present floor level, but on the inside are footings projecting in all 1 foot 10 inches from the wall face, their bottom course being 4 feet below pavement level. The trenches are filled in with gravel, and probably no part of the wall which remains was intended to be seen above the ground. The ashlar course is rough and uneven, only the top bed being level. The stone is of two kinds, Isle of Wight or Quarr Abbey stone, which shows no tool marks, and a chalky limestone, which has diagonal tooling done with a pointed axe. The western piers of the crossing are built on the top of this wall, which was at any rate one course higher than now when they were built, as a second ashlar course remains under the north-west crossing pier, and can still be seen above the present pavement level, the Norman masonry being cut to fit over it. On the whole, the masonry of the apse has very much the look of Norman work. In the absence of any written history of Romsey Abbey, the evidence of the building itself is the only guide to an answer to the question as to the plan of the church of which this apse formed part. There are four dates of Norman work in the church, from early work of about 1090 to transitional of 1180. The last of these does not concern the argument, and may be left out of consideration. The earliest work is to be found in two bays of the south aisle of the nave, and two responds in the north aisle which very closely resemble the work in the south aisle, and are probably of the same date, about 1090 to 1100. The second work is the general rebuilding of the whole church, which was begun from the east about 1120, and extends westward to the fourth bay of the nave on the south side. This work covers a series of years, and was perhaps completed between 1150 and 1160. The third work is the lower part of the west wall of the south transept, and the two eastern bays of the south aisle of the nave. It must, however, be noted that these are not of one build, there being a straight joint between them, the aisle built first. The transept wall cannot be earlier than 1150, but does not range with the adjoining work, which must have been built by then,

either in masonry or design. The clerestory, however, is of exactly the same work all round the transept, and is clearly of one date. There may well have been an interval between the building of the two lower stages of the transepts and that of the clerestory, but it cannot be a long one, and in it this wall must have been built. Instead of two ranges of windows in the two lower stages it has a triplet of tall lights, the cills being about the level of the springing of the heads of the first stage windows elsewhere, showing that the wall was designed to form part of the eastern boundary of the cloister, and the cills kept up to clear the cloister roof. Was there, at the time of the building of the transept and nave, anything standing on the site of this third work, which could not be removed till the adjoining walls had been built up to the triforium level at any rate? The cloister is not likely to have been an afterthought. When the nave was being rebuilt new windows were inserted in the early work in the south aisle, but it was not otherwise altered, and seems to have regulated the spacing of the nave arcade. There is no reason to suppose that if the eastern part of the aisle wall had been of the same work it would have been treated differently. It seems to follow, therefore, that the early wall was built against an older building, which was not destroyed till 1150. Is the apse to be connected with this building, in spite of the Norman look of its masonry? It is, at any rate, of a date so near to that of the first Norman work that it must have some relation to that, and the thickness of their respective walls is 4 feet 9 inches and 4 feet 10 inches, and this, with the evidences in the north aisle wall, and the fact that the axis of the apse is only a few inches to the north of that of the present building, would suggest that what has been found is the eastern end of an aisled church, of which the work in the aisles is now the only part above ground, and which may have incorporated in its south aisle a fragment of the tenth century church, which was not destroyed till 1150. As to what this fragment was, the inference is that it was the south wall of the south transept. Given the tenth century as the date of this building, it should have a plan somewhat of the Dover or Repton type. (See Vol. LIII, 327, 329, of the *Journal*.)

Supposing this to have been its plan, it was not destroyed but enlarged after the Conquest, perhaps about 1086, when Christina, sister of Edgar Atheling, took the veil here, and no doubt brought an accession of wealth to the house, by the addition of north and south aisles of the width of the transepts. This would give a reason for the unusual plan of the first Norman church. Round this church to the east the second work was built, according to the usual custom of not destroying existing work till the new church destined to supersede it was sufficiently complete to be used. Then the Saxon transept wall was destroyed to make the eastern procession door, and the church took its present form, the apse having, of course, disappeared at the building of the crossing piers. Along the line of both nave arcades between the piers is a great deal of broken building material, which may be the remains of the Saxon nave walls, pierced with arches when the early Norman aisles were added, and destroyed at the building of the present nave. And on the line of the north arcade there is said to be the base of a wall still existing, which may of course be only a sleeper wall, but could also be the Saxon north wall.

As for the delay in building the west wall of the south transept, Mr. W. H. St. John Hope suggests that there were standing at the time the eastern range of the older monastic buildings, joining on to the south wall of the Saxon south transept, which, being in continuous use, could not be cleared away until their twelfth century successors were completed. This would account satisfactorily for the delay.

ROMANO-BRITISH INTERMENT AT WEST WICKHAM, KENT.

In the early part of the year 1899, the attention of Mr. G. Clinch was drawn to the fact that in a field at West Wickham, Kent, some unusually dark earth, of a bluish-black colour, had been turned up by the plough. The discoloured earth occurred in one or two small spaces about 10 feet in diameter, situated at or near the highest part of South Field, and less than a quarter of a mile to

the south-east of the now ruinous farm-house which once belonged to Waits Farm.

The fact that a good many fragments of Romano-British pottery had been found on the surface of South Field ten or twelve years earlier by the same gentleman, and the more recent information from Mr. G. W. Smith that he had found portions of roof-tiles there, made it desirable to examine the spot more carefully than had hitherto been done.

In April, 1899, after digging one or two experimental holes, Mr. Clinch found a large mass of compact and very dark earth filling a dish-shaped excavation in the ground 8 feet in diameter, and about 2 feet 3 inches deep in the centre, measuring from the present surface of the ploughed ground. Among the black earth were found a number of large and small fragments of pottery, a large proportion of which appears to have belonged to one earthen pot of unusually large size. Unfortunately the pot had been crushed before it was found. A number of vigorous roots from a neighbouring elm tree had encircled it, and so much destroyed its form that it was not found easy to restore it from the fragments preserved. In and around the pottery, and especially on the inside of the curved fragments of the pot, were sparsely scattered a few pieces of chalky-looking matter which may have been the remains of bones.

The composition of the pot is interesting and unusual. It may be briefly described as a coarse, imperfectly baked, dark-coloured clay, enclosing a somewhat large proportion of light-coloured fragments, which at first sight might be mistaken for pieces of calcined flint. Close examination, however, will show that they have a laminated, shelly structure. It is difficult to understand where shells for the potter's purpose in such abundance could have been obtained, unless they were procured from the fossiliferous bands in the Woolwich and Reading beds, which may be found not far off, and whence also he might have taken the clay of which the pot is made. The upper part of the funereal mound, which was probably placed above the buried pot, has apparently been levelled in the course of ploughing and other farming operations, and partly, perhaps, by rain-wash

Mr. Clinch considers that these remains mark the site of a cremation and interment of the Romano-British period, and this view is confirmed by the opinion of Mr. G. E. Fox, F.S.A., who strongly advises further excavation with the object of ascertaining something about the building or buildings, of which traces remain on the surface of the field. This it is hoped to do before long.

Proceedings at Meetings of the Royal Archæological Institute.

February 6th, 1901.

Judge BAYLIS, Q.C., Hon. V.P., in the Chair.

Professor T. M'KENNY HUGHES, M.A., F.R.S., F.S.A., read a paper on the natural forms which have suggested some of the commonest implements of stone, bone, and wood.

A number of objects and photographs were exhibited in explanation of the paper, notably some specimens of war-clubs, etc. collected by Captain Cook in his voyage among the islands of the Pacific.

Mr. J. HILTON raised a question as to the origin of the jawbone-shaped club of the Maories, there being in New Zealand no quadruped large enough to have furnished the pattern.

Messrs. H. WILSON and GARRAWAY RICE also joined in the discussion. A paper on recent excavations in the Forum at Rome, by Dr. S. RUSSELL FORBES, was read by Mr. R. E. GOOLDEN, F.S.A. Plans were exhibited, showing the buildings treated of in the paper, which included the Regia and the Fons Juturnæ, with the early church of S. Silvestro in Lacu.

Both papers will be printed in the *Journal*.

March 6th, 1901.

Sir HENRY H. HOWORTH, President, in the Chair.

The proceedings opened with the reading of an address to His Majesty the King, drawn up by the President and Council of the Institute, as follows:—

TO THE KING'S MOST EXCELLENT MAJESTY.

MAY IT PLEASE YOUR MAJESTY,

We the President, Council, and Members of the Royal Archæological Institute of Great Britain and Ireland very humbly and respectfully desire to express the profound grief and regret with which, in common with the whole Empire, we heard of the loss which we have all sustained in the death of our great Queen and Empress. It may be pardoned in a Society devoted to antiquarian and historical pursuits to recall on such an occasion the high level which England has reached in the reigns of her three Queens, Elizabeth, Anne, and Victoria, a level which has culminated in the unprecedented reign of her late Majesty.

In humbly presenting our condolence and sympathy with Your Majesty, who has greatly honoured our Society by having been its patron for many years, we respectfully desire to give expression to our feelings of devotion and loyalty to Your Royal Person, and we

shall ever pray that the sun will continue to shine upon Your Majesty's throne and that the blessing of the Almighty will always attend Your footsteps and those of Her Gracious Majesty the Queen.

The Address was unanimously adopted.

Mr. C. E. KEYSER, F.S.A., exhibited a very fine series of lantern slides of Norman Tympana in English churches, commenting on each slide as it was thrown on the screen. He arranged the carvings by subjects into a number of groups, demonstrating the existence of local types and workmanship, but not establishing any basis for a system of dating by means of subject. Among the numerous examples shown the following may be noted as typical:—Architectural enrichments, crosses singly or in groups, foliage subjects, with or without animals, the Tree of Life, typifying the Cross, or the Cross itself, generally flanked by animals, the Agnus, alone or worshipped by animals, Sagittarius and Leo, St. Michael and the Dragon, Samson and the Lion, the legend of St. Margaret, and the Majesty in a vesica surrounded by angels (typifying the Ascension), or by the Evangelistic symbols.

The PRESIDENT and the HON. DIRECTOR subsequently spoke, both urging the publication of a complete series of English Norman Tympana in a volume, which would be of the greatest value as a book of reference for anyone working at the subject.

Mr. KEYSER also exhibited a very numerous collection of enlarged photographs of examples from all parts of the country.

Notices of Archaeological Publications.

A HISTORY OF SURREY. By HENRY ELLIOT MALDEN, M.A. Popular County Histories. Elliot Stock. London: 1900. 8vo, pp. viii, 321.

As the author is careful to remind us, a history whose whole extent occupies little more than three hundred octavo pages can aspire to give only a brief general view of the county, not of each place in the county. The illustration of phases of English history by examples taken from Surrey is one of the guiding principles which Mr. Malden lays down for his work, and this principle, being kept well in view throughout, goes no little way to relieve the present volume from the accusation of being merely one of those dull chronicles of important events which writers of books on a similar scale are too often contented to make them. Moreover, Mr. Malden is nothing if not critical, and it would perhaps be difficult to find a single fact recorded in his history on which he has not brought to bear the light of his own scholarly reasoning and research. This, which gives him his thorough grip of his subject, combined with the fact that his style is always vigorous, if at times a little rugged, will help to show that his history of Surrey is one well worth attention.

The keynote of Surrey history is to be found in the contiguity of the county to London. The county as named, whether we derive the name from the Anglo-Saxon *rice*, a kingdom, as from its earliest variants Mr. Malden thinks we should, or from the primitive *Rea*, a river, as Camden does, is an appendage of something greater to the north of it. So at least says Mr. Malden, although one is a little puzzled to think how he would apply the argument in the case of such counties as Norfolk and Suffolk. Nevertheless Surrey does indeed appear throughout its history under the shadow of London, and the process which began early with the absorption of Southwark into the City is being continued in our own day, when the county is becoming more and more to Londoners their most delightful rural suburb. But although, as Mr. Malden thinks probable, it is to this proximity of the capital that Surrey, which never corresponded to the territory of a people or a tribe, owes the fact that it has become a district with a name, it is to it also that the county is indebted for never having possessed any great city of its own. This circumstance perhaps affords one of the most distinguishing features of Surrey history. Proximity to London, moreover, which has meant for Surrey a shifting population, will in no small measure account for the present-day poverty of the county in any considerable remains of antiquity.

For all that, Surrey has been the scene of many striking events in history. Its position between London and the south coast, which made it necessary that every army which approached the capital from the south should march through it, will help to explain this. Other reasons, however, made it the scene of the first recorded fight

between two English kings, for, wherever the much disputed site of the Battle of Wipandune may have been, it was certainly in Surrey. Mr. Malden would give the credit to neither Wimbeldon nor Worplesdon but sees in the Wipsedone which occurs amongst the boundaries of the manors of Chertsey, Thorpe, Egham, and Chobham in a charter of Chertsey Abbey of the reputed date of 675 the naturally later form of Wipandune, which the earlier variants of Wimbeldon, Wimbaldon, and Wymbalton, are not. Worplesdon was never anything but a random guess. Further, Mr. Malden will have it that what we know of the battle and the immediately subsequent events will sort much better with the probable position of Wipsedone than either of the two previously suggested sites. This charter of Chertsey Abbey is interesting in other respects, and Mr. Malden's critical acumen is well illustrated in his method of dealing with it. To all appearance of thirteenth century reconstruction in the form in which it has been preserved to us, it contains at least one glaring anachronism and more than one palpable error. But it probably rests on a certain basis of truth and has the special interest of containing the one mention of Frithwald, the only English king in Surrey whose name has come down to us. He appears as a dependant of Wulfhere, on whom had devolved the inheritance of the Mercian King Penda. Thus for a time Surrey is under the overlordship of Mercia. But one hundred and fifty years later the supremacy of the West Saxons within its borders was again to be asserted, as it had been one hundred years before in the Battle of Wipandune, over the men of Kent. This supremacy is the most constant feature of the history of Saxon Surrey, and its results yet continue in the ecclesiastical organisation of the greater part of the county under the diocese of Winchester, the ancient West Saxon capital.

Through the whole course of Surrey history it is not possible now to follow Mr. Malden. He appears to have omitted no event of general importance or anything that is in accordance with his previously quoted principle. He would probably be the last to feel aggrieved if we say that he seems most happy in his treatment of the earlier periods of his history. To say so is certainly not necessarily to depreciate the rest of the work. The chapter on the ancient roads and Roman rule is an especially valuable result of the deep study he has devoted to the subject, but it would have been yet more valuable if the publisher could have been persuaded to illustrate it with a carefully prepared map. The chapters on the Domesday Survey and the Feudal Tenures are rather suggestive of the writer's acquaintance with these subjects than actually replete with it. Perhaps the fear that they would prove caviare to the general in what is confessedly a "popular" history has led to their severe compression, but to this their lucidity has been somewhat sacrificed. Other chapters that call for special mention are those on the Castles of Surrey, on the Forest, on Ecclesiastical Surrey, and on Surrey Iron and Industry. The whole work is one which cannot fail to make the many to whom Surrey is the home of their leisure hours better acquainted and in love with the picturesque southern county. The student will probably find his chief cause for satisfaction in Mr. Malden's present work in the knowledge that as the editor of the topographical section for Surrey in the forthcoming Victorian

County Histories, the author will shortly have a field where he can display his evidently wide learning to better advantage.

THE DEFENSIVE ARMOUR AND WEAPONS AND ENGINES OF WAR OF MEDIEVAL TIMES AND OF THE "RENAISSANCE."
By ROBERT COLTMAN CLEPHAN. Walter Scott, Ltd. London: 1900. 8vo, p. 237.

Of the numerous works on this subject the more important may be roughly divided into two classes—those treating of armour which may be seen by travellers in the numerous public and private collections at home and abroad, and secondly, those in which the use, development, and history of arms and armour are examined. No doubt the first class of works have great attractions for very many readers, and the various kinds of illustrations now so common, and often so truthful, aid considerably in the proper appreciation of the beauties and peculiarities of the arms and armour described. But to some students the matters dealt with in the second class are yet more interesting than existing examples, which owe their survival in many cases to the very fact that they were arms and armour of parade and not for the actual business of war, while the armour of which we can only study representations in marble, brass, painted glass, and illuminated MSS. was the armour which fulfilled its chief *raison d'être*, namely, the protection of the wearer's body in the rough and hand-to-hand fighting of the Middle Ages.

It would be hard for any one nowadays to write a book on arms and armour without quoting very largely from the works of those giants, Grose, Hewitt, Way, Von Leber. Anyone who reads those works will see that unless fresh ground is broken by the examination of hitherto unexamined sources of information, such as many of the documents in the Public Record Office, Somerset House, county and parochial records and accounts, and MSS. in private possession, there is little to be gleaned after the writers named above. And there are not many corrections to be made of their works, for they faced the subject in a practical way and gave us the raw material from which they compiled their work, without ornamental restoration or developments.

Meyrick, it may be suggested, should be mentioned in company with the above, but Meyrick was at times rather careless, and, much good work as he did, one feels the want of the stern and sometimes almost dry information of the other writers. Stothard, Blore, and the Hollises gave us invaluable work and were content to draw what they saw. So also with Waller, Boutell, Haines, and in a less attractive way Cotman and other earlier artists. Meyrick's *Skeleton* is all that can be desired so far as truthful drawing is concerned, but the restorations of Meyrick in his *Critical Inquiry*, however pleasing they may be to the general reader, lack the valuable exactness of the scale-drawn figures of Stothard, etc. Hewitt amassed a remarkable store of information from every source and made it still more useful by the comparisons he drew. Way and a few others worked deeper still in the untrodden paths of domestic history, and it is in this direction that, in spite of the great amount of knowledge already obtained, we may look for still more facts and

circumstances which will render clear and intelligible to modern people the uses and practices of those who, living in the midst of arms and armour, thought it unnecessary to explain the why and wherefore of so many things which to us are puzzles. Unfortunately, the best works of both these classes have from their nature become comparatively scarce or unattainable by the ordinary individual save in public libraries and other places where, though much may be read and examined, that quiet study and constant perusal which possession of a book gives us cannot be had.

Anyone, therefore, who will bring within the reach of those far from public libraries the general points of information on this subject in a handy and not too expensive form, may be said to have done a good and useful work.

We cannot expect the voluminous extracts from first authorities which the *giants* give us, but we must be content with the chief points of interest, and indications of where to look for ourselves when circumstances will permit of the subject being followed up.

In Mr. Clephan's book we have the results of a vast amount of reading and of observation of existing armour, but the information given is hardly well or systematically arranged. The book gives one almost an indigestion in the rapidity with which the author passes from one point to another, and one is inclined to think that the various forms of armour are treated too much as types of series rather than as individual examples of the armourer's art. The idea of uniformity in construction is apt to take hold of writers, when in fact there was, in those days, no such institution as the "sealed pattern" to which we are nowadays accustomed. The wearers of armour were those whose means allowed of their having armour made for them, and it was always costly. Another point that strikes one is the habit Mr. Clephan, with so many other writers, has of using foreign words such as *cubitière*, *genouillière* for the elbow cop and knee cop when we have good English words to express the parts of armour. And here it may be remarked that the terms *ogivale lancette* and *ogivale tiers point* (p. 112) are new to most of us. How the author arrives at the conclusion that "quarrels for the arbelest (*sic*) were called *muschettæ*, "hence the word musket," it is hard to see. Musket was a variety of hawk and a good English word.

Bows were not used at Rochelle in 1627, as stated on p. 182, for the reason that when the later order requiring a certain proportion of the impressed men to be archers arrived at the county headquarters the men had already left for the war, and so no such selection was possible. The broad arrow was not used as a royal badge by Richard I., and its first appearance as a mark in connection with Royal or Government stores is mentioned by Sir Thomas Gresham, who notes that certain money and stores sent by him into England were in cases so marked. The *anelace* is not of Italian origin, the name being merely a variant of *alenaz*, as the pointed daggers were called, as opposed to the *baselard*, which was a cutting weapon. The derivations of *Arbalète à tour* and the Prodd (p. 186) also are somewhat wild.

But in spite of these and some other points on which Mr. Clephan appears to be hasty in his conclusions, the book is interesting, and the numerous references and illustrations of foreign and even north-

country suits and portions of armour are very useful. For those who have not access to the chief works on the subject, and even for those who have, the book is certainly interesting, but it should not be taken alone, and the limits of the book as to size and cost, as referred to in the preface, prevent the numerous subjects from being treated otherwise than in a sketchy manner.

OLD ENGLISH CHURCHES: THEIR ARCHITECTURE, FURNITURE, DECORATION, AND MONUMENTS. By GEORGE CLINCH, F.G.S. L. Upcott Gill. London: 1900. 8vo, pp. xiv, 264. Illustrated.

This little book is meant to be an introduction to the study of ecclesiology, and gives in a concise form a very considerable store of useful information about the ancient churches of the country, and what they are likely to contain. Its subject matter is treated clearly and systematically, and is divided into four headings, as set forth in the title. But the feature of the book is the generous scale and high standard of its illustrations. There are fourteen full page plates, and a very large number of blocks in the text, carefully selected, and in some instances of quite exceptional merit, as, for example, Fig. 45, of Harberton pulpit, and Figs. 81 and 82, of stained glass from West Wickham Church in Kent. The chapter on monuments is perhaps the best, but throughout the book the treatment is clear and simple, with explanations of the terms used where they require it, and a wholesome avoidance of the confusing and useless practice of piling up instances, a very common fault in works intended for beginners. The statement as to the pulpits in monastic refectories being due to the coming of the friars in the thirteenth century will, we fear, not commend itself to antiquaries, but where there is so much good and careful work it would be ungracious to point out the few minor blemishes. The book may be heartily recommended to any one who wishes to begin the study of the ancient churches of England and their contents.

A List of the principal Works published under the superintendence and sanction of the Council of the Royal Archæological Institute.

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MDCCCCI.

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The first Meeting of the Session 1900-1901 was held on the first Wednesday in Nov. 1900; and such Meetings will be held at 20, Hanover Square, on the first Wednesday of the month (January excepted), November to July inclusive. The proceedings commence at 4 p.m. Any Member is at liberty to introduce a friend.

A desire has been expressed, by persons who have recently joined the Institute, to obtain the earlier volumes of the *ARCHÆOLOGICAL JOURNAL*, in order to become possessed of the complete series. The first five volumes, published by Messrs. Parker, London and Oxford, 1844-1848, may be procured through any bookseller. MEMBERS have special facilities in regard to the purchase of the subsequent volumes, VI. to LVI. inclusive; also in regard to the Transactions at the Annual Meetings, and other publications of the Institute.

(See list of Publications, page 3 of this wrapper.)

The general Index to the first twenty-five volumes of the *Journal*, brought into shape by the late Mr. Burt, and completed by Sir John Maclean, may be obtained from the Secretary, price 10s. 6d.

Cloth cases for binding the *Journal* may be obtained at the office of the Institute, price 1s. each.

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CURRENT ARCHÆOLOGY.

PROCEEDINGS AT ORDINARY MEETINGS.

Communications respecting the *Archæological Journal* should be addressed to the Secretary, Royal Archæological Institute, 20, Hanover Square, London, W.

THE PARISH CHURCHES OF NORTHAMPTONSHIRE: ILLUSTRATED BY WILLS, TEMP. HENRY VIII.

By REV. J. CHARLES COX, LL.D., F.S.A.

It is proposed in this paper to group together certain facts relative to the parish churches of Northamptonshire which can be gleaned from the pre-Reformation wills of the county of the time of Henry VIII., and also from a few of the reigns of Edward VI. and Mary. It is much to be desired that some general analysis, or tabulated extracts from these most interesting testamentary documents, should be prepared for every county.¹

Wills are invaluable as giving absolute proof of the dedications of churches. The dedications of this county as given in modern calendars and gazetteers are most faulty. For instance, a group of old churches is assigned to St. Luke, every one of which is a recent invention. The following table shows the relative frequency of the different dedications. This summary includes all old parish churches and a certain number of parochial chapels that had fabrics at a distance from the parish church, but omits the churches of mere religious foundations.

¹ An admirable paper on the ecclesiology of the West Kent churches, by Mr. Leland L. Duncan, F.S.A., was printed in the third volume of the *Transactions of the St. Paul's Ecclesiological Society*, 1895. Rev. F. W. Weaver, M.A., published annotated abstracts of a large number of Somersetshire wills in 1890, under the title *Wells Wills*.

The wills treated of in these pages are to be found at the Probate Office, Derngate, Northampton. I desire to acknowledge the invariable courtesy

and assistance extended to me by the officials.

A large portion of the extracts have been taken by my friend Rev. R. M. Serjeantson, M.A., to whom I am most grateful for the free use made of them in this article. I am hopeful that these pages will only prove introductory to a complete analysis for every parish by Mr. Serjeantson. In a few cases I have depended on the copious extracts made by Bishop Kennet in the eighteenth century, which are among his collections in the British Museum.

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The Celtic saint St. Columba is commemorated in the dedication of Collingtree, the terminal of the place-name

being also Celtic ; St. Wilfrid, of the Roman obedience, at Guilsborough ; St. Werburgh, at the chapel of Weedon Bec ; St. Guthlac, at Passenham, and at the chapels of Deeping Gate and Elmington ; and St. Pega, at Peakirk.

The full dedication of the church of Castor was in honour of the "Holie Virgins Seynt Keneburghe, Kenyswythe, and Tybbe," as is given in a will of 1532 ; though other wills only name St. Kyneburgh. The subsidiary church of Upton is also dedicated to St. Kyneburgh.

Pre-Reformation wills are often of value in giving the exact date of structural alterations or additions to the fabric of the church, as well as pointing to the time of considerable repairs. The fine embattled tower of Arthingworth was being built as late as 1515-17, as we find from various bequests. "Steeple" was the term then used indifferently for either tower or spire, or both. Building or considerable repairs were in progress at Whiston in 1526, at Rothwell in 1528, and at Hazelbeach in 1537 ; whilst in the latter year there was a bequest of 6*s.* 8*d.* to the steeple of Cransley Church "when the tyme shall come that it shall be new made." The building of the steeple of Old church was a long time in progress, certainly from 1512 to 1519. In the first of these years there was a bequest towards the steeple of 20*s.* ; in 1519 there was the handsome bequest of "xvj whethers off the second sortte, and iiij ewys of the same sortte." Richard Arnold left to the building of the roof of this steeple the best piece of oak in his yard, whilst another parishioner, in the following year, outdid this by leaving the two best pieces in his yard. The new aisle of St. John Baptist, in the church of Kettering, was building in 1512. The making of a porch at Moreton Pinkney was in progress in 1520. The roof of the church of St. Sepulchre, Northampton, was being repaired in 1528-9 ; in each of those years there was a bequest of 20*s.* towards "castynge of the leades and hellyng of pulkars." The south aisle of All Saints, Wellingborough was being built in 1530, when a parishioner left as much money as should suffice to glaze the middle window. Ten shillings were left in 1526 "to Our Blessed Lady of Ashby towards the building of the

parish church"; this would mean the nave of the conventual church of the house of the Austin Canons. A specially interesting bequest tells of repairs being done to the chapel of Our Lady standing in a wood in the parish of Croughton.

Among the bequests of general utility to the parish or district, the most usual kind were those made in favour of the repairs of bridges and highways or "causeys." There are several cases of bequests to the four bridges about the town of Rothwell, as well as to the different bridges at Oundle and Wellingborough. Other bridges that we have noticed are those of Barnwell, Brigstock, Deeping Gate, Denford, Moulton, Peterborough, Pitsford, Spratton, Walgrave, and West Haddon. The highways mentioned are generally those leading from a special place to the church, and in some instances for the causey from the parsonage to the church. Thomas Angiers of Paulerspury in 1532 left "one halff of my goodes to be spent in warkes of mercye as in mending of the hiewayes." Occasionally crosses, other than those in the churchyard, are named. There are bequests for two different crosses in the town of Irthlingborough, and one testator of Chipping Warden, in 1529, leaves twenty pence to the repair of the cross that stood next his house.

There are various references of interest with regard to the Sacrament of the Altar.

Thomas Doddington, of All Saints, Northampton, leaves, in 1530, £10 in money or plate to make a pix for the Sacrament, and requests that his brother (who was probably a working goldsmith of the town) should "make the said pix after such a goodly manner as he can devyse." Henry Godwin, of Irchester, leaves, in 1526, 40s. "towards the bying and purchasing of a pyxe of sylver & gylte to ley the blessed Sacrament or body of our Lord Jhesu Cryste, there to remain for ever."

Stowe Nine Churches had a bequest in 1532, of "xs. to bye a cloth to leye over the holie sacrament on Corpus Christi daye & at all other tymes nedeful."

The following relate to the English use of a canopy over the pix:—

"To mendynge the canopye and blessed Sacrament of

the aulter *xiid.*" (Holcot); "towards the mainテナナunce of a canopye over the hie aulter, *iiijd.*" (Daventry); "to the sacrament of the aulter to by a canopye *xs.*" (Great Billing); "a canope to hang over the holy & blessyd Sacrament" (Brafield).

With regard to altar plate :

The mending of a chalice gained a bequest at West Haddon of 6s. 8d. in 1553; whilst £3 was at the same time left to that church to buy a new chalice. Bequests are also found towards buying a new chalice on three or four occasions, 40s. being the largest sum.

In these wills the celebration of the mass of the Five Wounds is frequently enjoined. There are also instances of St. Gregory's trentals, the mass of Pope Innocent, and the mass of *Scala celi*.

A bequest of 1529, providing for five funeral masses, specifies that they are to be: (1) The Five Wounds, (2) Our Lady, (3) Holy Ghost, (4) Jesus, and, (5) Requiem "for my pore soule." A Brington will stipulates for five masses: (1) Nativity, (2) Epiphany, (3) Resurrection, (4) Holy Ghost, and (5) Assumption of Our Lady.

John Sumerly, of Mears Ashby, requested that five priests might have five groats to sing five masses of the Five Wounds on his burial day.

The use of fine household or personal linen (of course unused) for church purposes is frequently illustrated.

John Robinson leaves his best kerchief to the high altar of St. Gregory's church, Northampton, "to make a corporax." A Naseby parishioner bequeaths a kerchief to make a corporax, and three silk pillows. Henry Mayo, priest of Chipping Warden, left in 1516 "a fine kerchieff to make a corporax."

An Oundle woman left half a sheet to the altar of Our Lady, and the other half to the altar of St. Sythe. Cecile Smyth, widow, of Carlton, left in 1529 two sheets to make a surplice, one to make two altar cloths, and a table-cloth for the high altar. "A dyaper bordcloth" was left to the high altar of Flore, "to remayne as an ornament ther." Joan Parker, in 1538, desired that a fine sheet might be laid on her body when borne for burial to the church of All Saints, Northampton, which was afterwards to be used as altar cloth at the high altar.

Two references have been noticed to the houselyng cloth. There was left to the church of St. Giles, Northampton, in 1522, "a great diaper Towell to be a houslyng cloth." A "towell cloth" was left to Carlton church, "for to serve the Paryshioners withall when they take their ryghts of the church at Ester and other tymes."

"A short towell of dyaper for the lavatory" was left to the chapel of St. Werburgh, Weedon Bec, in 1527. Sir John Clarke, parish priest of St. Peter's, Irthlingborough, left, in 1518, a towel to the high altar of each of the churches of Irthlingborough. "A towell to wype ye prests handes w^t" was a bequest to the church of Naseby. The most singular of such gifts is the following, which occurs in the will of Henry Langley, of Harrowden Parva, under the late date of October 13th, 1557 :—"My best towell to hange in the rood lofte, my worst towell to hange at the hye aulter to serve the preste at washing his handes before the sacringe and after." What was the use of the towel in the rood loft? Was there an altar there? Or might it not have been used (if there was any special local devotion) to wipe the feet of the rood after salutation?

A sensible bequest, though small in amount, to the high altar of Great Brington was that of William Smyth in 1529, when he left "halfe a quarter of barley to be bestowed on suche maner of thyngs as is mostt necessary and convenyent to ye high aulter." But right through this series of wills, some very small bequest to the high altar, usually of money, is the regular rule, with few exceptions.

Among the vestments left to Northamptonshire churches are : "A vestment of velvete suitable to the best cope" (Pytchley); a cope of crimson velvet (Orlingbury); a cope and vestment of white silk that cost £7 (Kettering); a vestment price 13s. 4d. (Kilsby); "my surples and a vestment prec. xxs." to Duston church from Sir Robert Parke, vicar, 1519; a cope and vestment (Preston Capes). More frequently money was left for the purpose of buying vestments; St. Sepulchre's had a bequest of £5 of this kind, in 1534, and Rushden a like sum to buy a cope or vestment. Smaller bequests towards

the purchase of vestments were common. Such are : 40s. towards the buying of a pair (set) of vestments at Aynhoe; 40s. towards a cope at Whittlebury; 20s. to be bestowed in vestments at Hardington; the residue of a small estate at Exton to buy a cope or vestment; 6s. 8*d.* and an acre of pease towards a cope for Naseby; and 6s. 8*d.*, in 1516, "towards the bying of a cope to honour Almighty God in the church of Ashby" (Mears Ashby).

Sir Richard Knightley (the father of Sir Richard, the great Puritan and patron of the Mar-prelate tracts) by his will of 1538 was most generous in the way of vestments to the churches of his neighbourhood. "To the intent that God's service may be the better maintained" he left a vestment of the value of 20s., or 20s. to buy one, to the churches of Fawsley, Everton, Badby, Newnham, Lichborough, Stowe, Weedon, Norton, Braunston, Byfield, Woodford, Catesby, Helidon, Charwelton, Preston, Farthingstone, and Plumpton.

There are not many references in these wills to anything pertaining to Holy Baptism, but in 1526 the rector of Holdenby left "a basson and a laver" to the font; and there was also a bequest to the church of Bugbrook of "a charger to wasche the hands when chylden be crystened." Such washing would be essential at the time when chrism or holy oil formed part of the baptismal ceremony. A parishioner of St. Peter's, Northampton, desired to be buried in the churchyard and "before the christening dore."

The references to books chiefly relate to those used in the services of the Church. They are too well known to ecclesiologists, under their differing nomenclature, to need annotation.

To the church of Great Billing "ij portuisses w^t a masse boke"; "To bye a graylle for Cold Ashby churche xs."; "To by a mase booke and alter clothe, vjs. viij*d.*," All Saints, Northampton, 1542; and to the church of Tiffeld the vicar leaves, in 1516, "my best Portuys, my manual of parchment, and sawter." Henry Newman, vicar of Harringworth, left in 1521 to the parish church of Elneston "my notid Portus and a surplus there to remain in the custody of the chauntry prest for ever, but

I will that the same boke and the surples be registered in the Church Reves Inventory."

There are some interesting examples of the re-supply of the old church office books towards the end of Mary's short reign. In 1557, 26s. 8d. was left to the church of Crick "towards the buyinge of a new Grayle book." On June 3rd, 1558, there was a bequest of 3s. 4d. "towards the byinge of an Antiphonar."

In 1529 the college of Irthlingborough received a bequest of 10s. towards buying books. Roger Alyu, husbandman, in 1521 left 20s. to Benefield "to the buyinge of bokes necessarie to the church."

But by far the most interesting book bequest to a church is one of March 22nd, 1526, which tends to prove that printing had not driven out the love for the beautiful and painful work of the scribe. At the date mentioned Sir William Adson, parson of Chipping Warden, left "to the paryshe church of Chepyng Warden vⁿ sterling to buy a boke called a Breviary to be made. I have spoke for ytt myselfe to oon dwellyng at the blakefreers in Herforde and payd to him in yernest vjs. viijd."

The following bequests pertain to volumes other than office books. George Symonds, parson, of Maidford, leaves "to the abby of Byndelesden my Decretalls,¹ to the abbey of Ashbye a Boke called Ludolfus de vita Jhesu,² to Sir Robert Goodmulne my boke of prayers on parchment, to Sir William Croke a boke called Virgill, to the vicar of Preston a boke called Postilla,³ to Mr. Foxley the elder a boke called De Vita Jhesu,⁴ so that he gyve it to a preste after his decease to pray for me."

Thomas Pratt, vicar of Spratton, which was a vicarage of the Austin Abbey of St. James, Northampton, left, in

¹ The Decretals of Pope Gregory IX. were printed in 1518, and with comments at several other early dates.

² Ludolph of Saxony, Prior of the Carthusians at Strasburg, was the first to write a connected life of Christ. The earliest edition of this great folio was printed in 1474.

³ This may have been the postils on the Epistles and Gospels already named, or possibly *Postilla elucidativa*

et magistralis super epistolas Pauli Reverendi patris: fratris Nicolai de Gorran sacre pagine professoris ac Provincialis Francie Ordinis Predicatorum, which was printed in 1502.

⁴ The vicar was not likely to have had two copies of Ludolph, and this was probably *Vita Christi secundum Bonaventuram*, which was printed in 12mo in 1481, and again by Wynkyn de Worde in 4to in 1525.

1510, "To the House of St. James a Boke called Pupylla Oculi."¹

The vicar of Blakesley, in 1523, left to the chantry priest of that church, in addition to his "mydyll gowne and a fustyan jackquet," "*Manipulus Curatorum*" et *Legenda Lombardica*."²

John Harres, master of arts and vicar of Hardington, was evidently a considerable student and dabbled in physic and astrology. By his will, dated December 9th, 1558, he leaves to Master William Dixson, priest, "all my divinitie books if he will fetch them, to Doctor Tornear all my physicke bokes one excepted called my black boke & that boke to be restored to Merton Collidge in Oxford w^t an Astrolable of brasse with introductions & xxs. in money & all Potticarye stufe or ware."

In 1541, John Parnell, priest of Wellingborough, leaves to Sir Edward Parnell his "best New Testament in Latyn, a Postilla upon the Gospells & Epistles by the yere,⁴ *Legenda Sanctorum*, and ij of the old Portuss." He also left to Master Farnworth "the vj bokes of the byble of Hugo de Vienna."⁵

The lights before the images were in some of the smaller churches very numerous. For instance, at Dallington there were thirteen lights: those of St. Hugh, St. Nicholas, St. John Baptist, St. Anne, The Trinity, Our Lady in the Chancel, Our Lady by the Trinity, St. Katharine, St. Thomas, St. Margaret, and All Hallows, in addition to the Sepulchre and Road

¹ *Pupilla Oculi omnibus presbyteris, precipue Anglicanis summe necessaria*, etc. by John de Burgh, chancellor and professor of divinity at Cambridge, compiled in 1385, was a favourite treatise of the educated English clergy. It treated of the administration of the Seven Sacraments and other ecclesiastical duties. It was printed in 1510.

² *Manipulus Curatorum* was printed by Wynkyn de Worde in 1509. The colophon of the copy in Lambeth library is a sufficient explanation of its use: "*Explicit libellus intitulatus Manipulus Curatorum, pro instructione neophytorum curatorum editus a doctissimo viro domino Guidone de Monte Rocherii*."

³ *Longobardica Historia que a plerisque Aurea Legenda sanctorum appellatur, sive Passionale sanctorum* was the title of the edition of the Golden Legend printed in 1516. In earlier printed Latin editions, *Lombardica Historia* is usually given as the secondary title. It was the work of Jacobus de Voragine (1230-1298), Archbishop of Genoa.

⁴ *Postilla Guillelmi super Epistolas et Evangelia de tempore et Sanctis et pro defunctis* was printed in 1488.

⁵ The text of the Bible, with Cardinal Hugo's comments or postils, was printed in six folio volumes at Nuremberg in 1504.

lights. At Hardingston there were six, at Holdenby and Kingsthorpe eight.

Among the more curious or interesting lights may be named that of St. Columba in Collingtree church, taking us back to the old Scottish church that first brought Christianity into Northamptonshire through the preaching of Diuna. St. Cuthbert's light at Bugbrook was also an unusual one for the Midlands. At Towcester there was a joint light to St. Roche and King Henry. This latter of course refers to Henry VI. ; though the attempt to have him canonised failed, there is hardly a county in England but had one or more images of him in the churches.

The bequests in kind for the support of different lights or for other more general church purposes are exceedingly varied. One of the most usual is a strike or quarter of barley and other kinds of grain and malt. At Woodford, in 1526, a load of wheat was left to the chapel of Our Lady ; whilst at Naseby a load of pease was left to the Rood. Sheep were common bequests for like purposes ; we find them differently described as "sherehogs," "ewehoggerells," "whethers," and "lambbes." At Towcester there was left to the brotherhood of Our Lady and St. George "an oxe calfe of the age of xij wekes." There are several instances of the bequest of hives ; a parishioner of Naseby in 1529 left all his hives of bees to maintain the Rood and Sepulchre lights. Amongst metal gifts to churches may be named a silver spoon, a pewter dish, and "my biggest brasse Pott."

Now and again the bequests to the various lights were in kind that did not require barter or sale to make the gift available. Thus, Thomas Robins, husbandman, left, in 1531, to the village church of All Saints, Holdenby, two pounds of wax for Our Lady's light, and one pound of wax for each of the lights of the Rood, of All Hallows, the Sepulchre, St. John Baptist, and St. Christopher.

The lights used at funerals and requiem masses are always prominent in pre-Reformation wills. They were known by different names in different parts of the country. Mr. Weaver gives a list of the West Country terms, of which the commonest was *lumen mortuorum*. Mr. Duncan found that in West Kent the usual term was

"herse lights." In Northamptonshire it is almost invariably "the torches," and small money bequests towards the torches occur in a large majority of the wills. They were great serges or yellow tapers made of a mixture of resin and wax, and were kept by the wardens ready for the use of all parishioners who required them. In addition to the simple bequest to the torches, expressions such as these are found, "to the church reeves to make torches," "xxd. to help to by a torche," "two torches of 4s. apiece."

The Sepulchre light, as has been remarked, receives special mention in the Northamptonshire wills, being very rarely omitted. But in addition to this there are some other specific references to the Easter Sepulchre, which show that in various churches it was more than a temporary erection. There are various bequests at Brigstock toward the repair of the Sepulchre, including the gift of a bullock of two years old. John Tresham, of Rushden, who died in 1420, desired to be buried in the church of St. Peter "by the sepulchre." There are also some references to gilding the Sepulchre before Easter.

With reference to the two lights on the altar, there was a bequest in 1533 of £10 to buy a pair of silver candlesticks, and a smaller sum to the church of Moreton Pinkney for two candlesticks to stand before the high altar.

A "candyllstike" was left to St. Clement's altar at St. Giles, Northampton, in 1528.

In 1531, there was left to the church of Braybrook "a candylstick of v flowers & v tapers of v ponde waxe to be sete before our lady."

The will of a Brington parishioner of the same date leaves "to the Image of our ladye that standeth in the chancell a candlestick of latten." Another will leaves "a candlestick of laten with 5 branches p^r x s" to the same image.

In 1534, there was a bequest of 3s. 4d. "to the roode lofte (Broughton) to the buying of a candellsticke to set tapers on."

As to the special time for lights, particularly at mass, there are various entries—such as "a pounce of wax candle to burn at high mass" (Kingsthorpe); "a taper of

xvⁱⁱ to be continuously burning before the Blessed Sacrament at mastyme" (Old).

Henry Mayo, priest of Chipping Warden, desired (in 1516) that "afore thei ymage Petur & Paull ther be burnyng light of Wax and hon thee holy day All Seynts tyme as ytt ys used and on their worke day at hye mass."

Here it may be mentioned that Chipping Warden was dedicated to St. Peter and St. Paul. These wills confirm in several places Mr. Duncan's statement that the image of the saint or saints to whom the church was dedicated always stood in the chancel.

Occasionally a church possessed a sacred picture, and in those cases there was usually a lamp or light before it. References occur in these wills to "the blessed picture of our Savyour Christ Jesu," in the church of St. Andrew, Barnwell; to the painting of Our Lady of Pity, at Moreton Pinkney; to the painting of St. Michael, at East Haddon; to the painting of St. Lawrence, at Towcester; and to the painting of St. Cuthbert, at Old. Half a sieve of malt was also left to the painting of Our Lady at Barnack.

Some references to "painting" may apply to the re-colouring of a sculptured figure, but it does not seem probable that that was the case with any of the instances just cited.

In addition to the painting of Our Lady of Pity at Moreton Pinkney, there were *Pieta's* or images of the Blessed Virgin with the dead body of Christ in the churches of Brixworth, Bugbrook, Little Houghton, Great Houghton, St. Giles, Northampton, Middleton Cheney, St. Peter's, Northampton, and Rushden. "Our Lady of Comfort" was the usual name for a *Pieta* of some celebrity at the church of the Carmelite Friars of Northampton, to which bequests were sometimes made from distant parts of the county.

Two instances occur of Our Lady of the Nativity. At Bugbrook bequests were made "to the mayntenance of the natyvyte," and to "the light before the nativity in the chancell"; whilst at Long Buckby, Alice Saunders leaves two of her best kerchiefs to "Our Lady of Bethlem."

Sometimes bequests are found for particular figures or images which were obviously intended for their adornment. To "Our Lady of Whittlebury" was left, in 1522, two ells of ell-broad cloth "to be drawne upon wyre before hir." A pair (that is, a set or rosary) of "white aumber bedes" to Our Lady in the chapel at Luffenham. Another bequest left "a pere of coral bedes" to Our Lady of Walsingham and Our Lady of the White Friars, Northampton. A kerchief was left to Our Lady of Pity at St. Peter's, Northampton. There is a variety of information to be gleaned with respect to the decking of images and their various coats or garbs that pertained to the great church of All Saints, Northampton—particularly those that were carried in procession on Corpus Christi Day—but as it has not been found in wills, it would be foreign to the present purpose to quote it.

There was a bequest, in 1534, at Middleton Cheney, "To the iij Kyngs of Collyn (Cologne) oon strike or barley."

The chantry priest of Spratton, in 1520, left to the bedehouse of St. Thomas at Northampton "my iij ymages of Alabaster."

At Pitsford 40*d.* was left to the gilding of the rood loft. In 1516, 20*s.* was bequeathed at Mears Ashby for painting the rood loft, and 6*s.* 8*d.* in the following year "to the paintinge of Mary & John." At Brington, in 1531, 10*s.* was left for the fixing of Mary and John, and other bequests for a new cross (crucifix). In 1537, there were various small bequests at Wellingborough for the painting and gilding of the High Rood. At Bugbrook there were four lights in the rood loft to which bequests were made. At Rushden, in 1533, there was a bequest to the "Hye Roode," and at the same time to the "Grene Rode," whatever that may have been.

With reference to tabernacles, for the enclosing of sculpture, the following have been noticed :—

In 1516, Henry Mays, priest, of Chipping Warden, left 6*s.* 8*d.* "to the makinge of the tabernacle of oure lady of Warden."

Elizabeth Makernes, widow, of Finedon, left 36*s.* 8*d.*, in 1534, "to the making of the tabernacle of Jhesus."

In 1523, there was a bequest at Kettering to the gilding and painting of the tabernacle of Our Lady.

Altars other than the high altar occasionally obtain specific bequests. Henry Dunkley, parson, of Heyford, leaves 2s. in 1521 to the repair of St. Botolph's altar in that church. Simon Smith, of Foxton, leaves in the same year 12*d.* to the gilding of the altar of St. Nicholas in Foxton Chapel. A Courteenhall bequest leaves "xs. towards buying of a tabul (reredos) to sent Johns aluter."

There are a few references to banners. There was a special banner of St. Martin at St. Sepulchre, Northampton; a bequest of 5s. was made to the church of Brington "to bye a crosse banner clothe"; 8s. was bequeathed to Blatherwick church, in 1553, "to bye one banner clothe wth the picture of St. George." As a proof of there being several banners in ordinary county churches, it may be mentioned that a widow woman of Spratton, in 1544, left money to purchase "a banner clothe yt shalbe better than any now in the Churche." There are also bequests towards banners for the churches of Wellingborough and Bugbrook.

The gilds, fraternities, or brotherhoods that we have noticed in these Northamptonshire wills *temp.* Henry VIII. are as follows :—

Benefield	...	...	...	St. John's.
Brixworth	...	...	...	St. Boniface.
"	...	...	...	Holy Trinity.
Cottesbrook	...	...	...	Our Lady.
Cranford	...	...	...	Our Lady.
"	...	...	...	St. Catharine.
Dallington	...	...	...	Our Lady.
"	...	...	...	The Rood.
Daventry	...	...	...	Holy Trinity.
Finedon...	...	...	...	Our Lady.
"	...	...	...	The Sepulchre.
"	...	...	...	St. John's.
Kettering	...	...	...	Our Lady.
"	...	...	...	Sepulchre.
"	...	...	...	St. John Baptist.
Mears Ashby	...	...	...	St. Margaret.
"	...	...	...	Holy Trinity.
"	...	...	...	The Sepulchre.
Moreton Pinkney	...	...	...	The Rood.

All Saints, Northampton	...	Our Lady.
"	...	Holy Trinity.
"	...	Corpus Christi.
"	...	St. John Baptist.
"	...	St. George.
"	...	The Holy Rood.
"	...	St. Catharine.
St. Gregory	...	The Holy Rood in the Wall.
St. Giles	...	St. Clement's.
"	...	Holy Cross.
Oundle	...	Our Lady.
Pytchley	...	Our Lady of Pity.
"	...	St. Nicholas.
Raunds	...	The Resurrection.
Rushden	...	Our Lady and St. Catharine.
Towcester	...	Our Lady and St. George.
Wellingborough	...	Our Lady.
"	...	St. Catharine.
"	...	Corpus Christi.
"	...	The Rood.
"	...	The Sepulchre.
"	...	Mass of Jesus.
Wollaston	...	The Sepulchre.

The custom sometimes prevailed of a dying person leaving money to a gild in order to become a posthumous member, and thus secure their prayers. A very curious instance of this occurs in the will of Widow Agnes Doles, of Oundle, in 1514, wherein she leaves a sufficient sum to the gild of Our Lady to make her two husbands and herself "brethern and systour of the seid gyld."

At Raunds there was a bequest of 6s. 8d. to the gild of the Resurrection for a dinner.

A Peterborough widow leaves a bequest to the Motherless Children of St. Catharine of Lincoln.

Roger Alyn, in 1521, leaves 10s. "to the byldynge of Seint John Gelde in the church" of Benefield, which seems to have reference to the screens or parcloles forming the gild chapel.

A matter that has caused some surprise in going through these wills is the number of instances of legacies to the religious individually and not collectively. Such gifts cannot be held to accord with the true interpretation of the vow of poverty in the better monastic days, but sufficed, we suppose, to afford a small supply of "pocket money" for particular needs. These bequests

could not, of course, reach the brethren or sisters save through their superior's hands. Bequests to each of the sisters or nuns of the house of St. John Baptist, Rothwell, are not infrequent, and it is difficult to conjecture how these good ladies could have spent their small legacies in any way save for the community.¹ The most curious-looking bequest to this community is one of 1521 : "To the Convent off Nunnys a Browne Kowe." Master John Sokkes, priest, of Hardington, left 13s. 4d., in 1527, "To every lady in delaprey." This was the Cluniac convent of De la Pré in Hardington parish. There are several instances of bequests not only to the Cistercian abbot of Pipewell, but to each one of his monks. The abbot of the Austin house of St. James, Northampton, had left him by the vicar of Duston in 1519, 20d. and at the same time "every of hys brothern 12^d" and every novice 2d.

In 1532 the same abbot received 2s. and every canon, being a priest, 1s. After a like manner the Premonstratensian abbot of Sulby and each of his canons were remembered in several wills. No order seems to have been exempt from these individual gifts ; a priest in the north of the county, remembering the double Gilbertine house of Sempringham, left 20s. to be divided equally among the canons, and another 20s. equally among the strictly cloistered nuns. Nor were the friars forgotten. The prior of the Black Friars, Northampton, received by will a goblet of silver in 1536. Ten years earlier a well-disposed Northampton lady leaves a pair of sheets to the sub-prior of the Austin Friars and single sheets and a silver spoon to other friars, whilst the cook of the same house became the fortunate possessor of a feather bed.

Sir Richard Knightley, of Fawsley, from whose will of 1528 we have already quoted, is one of those late cases which tends to disprove the popular notion that founders of chantries were usually entirely selfish in their bequests, and that the minister was nothing more than a mass priest. In addition to providing for elaborate masses and trentals at the time of his decease, he provides

¹ Letters are extant of English ladies of Roman Catholic families, who had taken the veil in continental nunneries,

writing to their relatives last century and asking for a little pocket money to buy snuff and warm gloves

for "a secular preste to synge & praye for my soule in the parish church of Fawstey for terme of xx^{ty} yeares next after my departure, & to have yearely for his wages & salarye x markes, & that the sayd preste shall during the said tyme teach children their playn Song, after the nomber & rate as my executors shall thinke mete & convenyent, without anythinge taken of the sayd children or of ther frendes for ther techinge."

A more striking instance of general teaching being a part of the function of a chantry priest of an old foundation occurs in the will of "Sir Thomas Hertwell, of Spratton, clerk." By his will of 1520 he leaves "to every Scholar of my paryshe that can syng iiij d. & that cannot ij d., & to every scolar that I have else i d., & that have ben my scholars beyng at my buryal, a peny, & as moche at the moneth day to every scolar of myne that are present, and to such as have ben my scholars, beyng then yn holy orders, present at my buryall, xij d."

Another example of the same character is to be found in the will of John Bloxam (June 20th, 1518), priest of the chantry of B.V.M. in the church of Great Addington. One clause of this interesting will runs as follows: "I will that any priest who has been my scholar in time past to have, that he may pray for me, £10, or their value in books."

A name for Rogation Week that is seldom met with, and not quite easy of explanation, is Cross Week. "Sir John Jacson," vicar of Hambledon (Rutland), left in 1519 "To the procession in Cross week a Ewe & a Lamb." A Harleston will of 1558 leaves "every Crosse Monday yearly, 8^d. to be dronken amonge the poor." Thomas Rowell, of Cottingham, by will of 1559, left bread and drink on Cross Monday, at the discretion of the churchwardens, "so long as the worlde endurethe," the cost to be defrayed from the rent of the house in which he then dwelt.

It seems to have been the custom before the Reformation, as we well know it was afterwards, for the churchwardens to provide refreshment for those who made the often long perambulation of the parish bounds at this season. John Worthy, of Whissenden (Rutland), left, in

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1537, a cow to the churchwardens, that they might evermore give the parish "bred & drinke in the Mondaye in the Rogation weke, for to pray for me and my frends." A cow was also left to the wardens of Long Buckby "to make a drynkyng w^t in the processyon weeke."

Only one reference has been found to a church ale, a testator of Norton by Daventry leaving a strike of malt for the church ale in "Whitson Weke."

Amongst various entries, difficult to classify, the following may be noted :—

In 1521 a lectern of latten was left to the church of Old. Two shillings were left in 1534 towards the making of a church clock for Towcester. Ten shillings were left to the church of Spratton in 1510, by Thomas Powell, the vicar, to buy "a par of Sensors."

In 1522, 3s. 4d. was left towards a new pair of organs for the church of Wellingborough.

Most remarkable is the 1522 bequest in a will of St. Giles, Northampton, wherein two shillings are left "to the repair of the vise of the Holy Gost." The word "vise" means a mask or representation. Probably it here refers to the model of a dove used at Whitsuntide.

There are various bequests to hermits, mention being made of the one on St. Thomas's Bridge, Northampton, of St. James's Chapel, Rushden (who kept a causeway in repair), of St. Gregory, of St. Austin, and of Haddon, the last of whom must have been a priest, for 10s. is left him to sing a trental. There is also a bequest to the anchorite or recluse at Northampton to say five masses of the Five Wounds—which is a further proof that an ankerhold sometimes contained an altar.

The wills of the parish priests usually provide that they shall be buried in the chancel of their church. John Hay, vicar of Kilsby, requests (1521) that he may be interred "afore my stawle," two other incumbents before their desks, and one beneath the lamp in the centre of the chancel. This part of the church was rarely used for lay burial, but we suppose John Nichols, of Islip, succeeded in his desire in 1531, for he left a black bullock to the parson on the express understanding that he was to lie within the chancel. Henry Godwin, of Irchester, expressed an exactly opposite and far humbler

wish in his will, of 1526, wherein he desired that his body might be buried in the parish church "next unto the holy water stoke as may be so the people may tredde and come over my grave and sepulture."

It is generally supposed that the egotistic custom of leaving money for a funeral sermon or sermons came in at the Reformation, but Phylippe Mechyll, of Flore, widow, by will of 1527, after providing for a trental of masses, left 6s. 8d. to "a clarke beyng graduatte to saye a Sermon in the said church of Flower the day of my said buryall." Robert Gun, of Raunds, in 1558, instructed his executors to provide three preachers for three sermons, at a charge of 5s. each.

Jane Brafield, of Northampton, in 1522, desires to have "y^e pall of y^e blacke frears upon my herse & y^m to have xx*d* for it." A Rothwell will provides for "ij blake clothis with white crosses on my grave & on my wyvis, & ij serges to burn at all the masses said & all masses at hi aultar for a yeare." An All Saints, Northampton, will requests that six torches may burn at the burial and at month's mind, and that immediately after they be divided among the five chief fraternities of the church.

A general distribution of small benefactions to the parishioners on the day of the funeral was not unusual, without ordering the recipients to be present. There are several cases of 1*d*. and 2*d*., and in one instance as much as 4*d*. being given to each householder. A Naseby testator left a cheese for every householder, the best ones to go to the poorest. The poor of Old had a load of wood distributed to them on the funeral day of a fellow parishioner.

As to provision made for funeral processions, it must suffice to quote two examples. John Naylor, of Rothwell, provided, in 1522, that "my wyfe bring me honestlye to the Chirche with xij pore folks baryng in thyr hands one taper of waxe beyng of half a li apece." Anne Shefford, of all Saints, Northampton, requested, in 1542, that "all the prestes of the College with all the clarkes of the s^a parish shall see me to the Church & they to have for their labour after the order of the Church."

James Ball, of Wellingborough, in 1526, left 16*d.* to the eight ringers to ring at his burial.

Edward Martin, parson, of Old, added a remarkable codicil to his will, in 1544, appended as he states by his own hand. Therein he provides that there were to be brewed against his burial four quarters of malt; and three bullocks, six sheep, three calves, six pigs, and "hens & capons as nede shalbe" were to be prepared for the same, together with three quarters of "bred corne, that all comers might be rejoiced."

THE REGIA.

By S. RUSSELL FORBES.

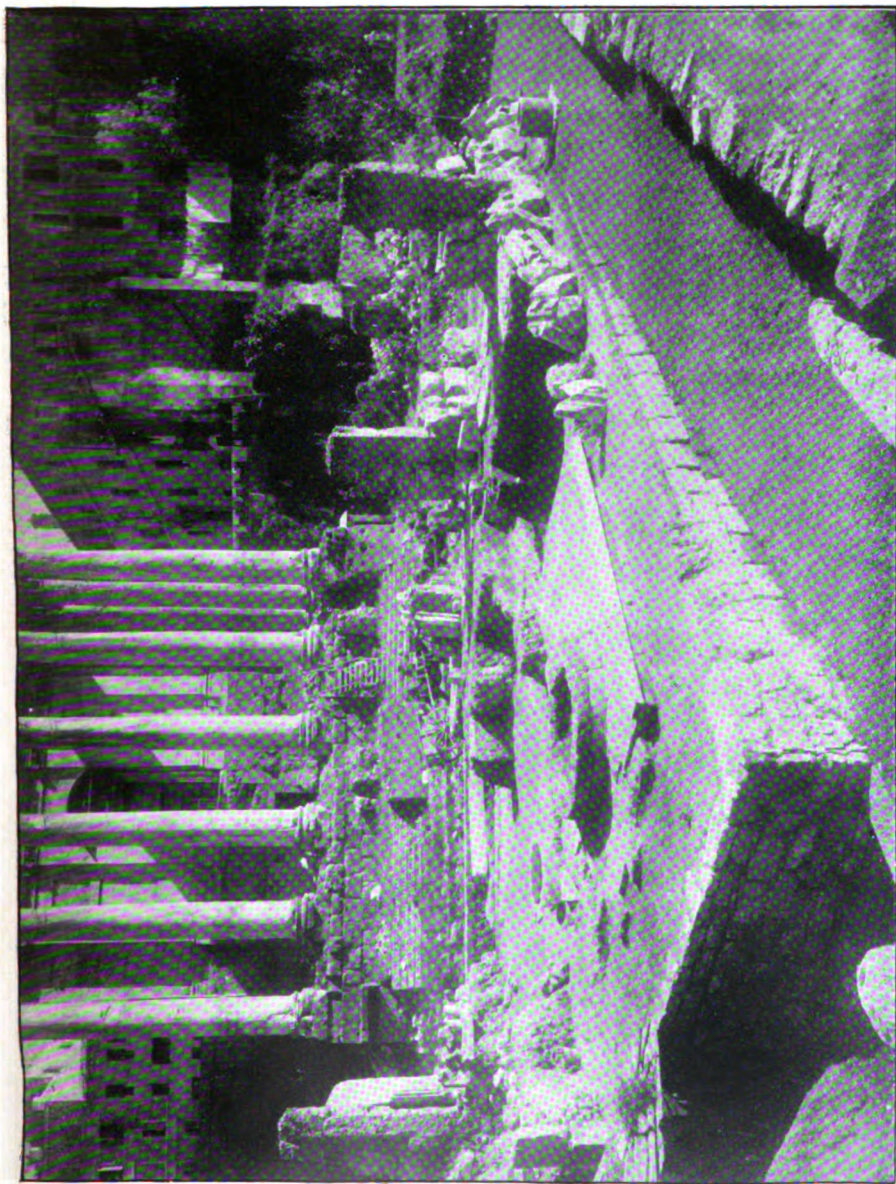
Some most interesting remains of the Regia, the official residence of the Pontifex Maximus of ancient Rome have been discovered during the past summer. It was partly exposed in the excavations of 1882, and covered up again. I argued at the time that it was part of the original Atrium Vestæ, but in 1886 Mr. F. M. Nichols, a member of the Institute, demonstrated that the remains then visible were those of the Regia. Mr. Nichols's hypothesis is correct.

Servius, *Æn.*, viii, 363, gives the exact location. He says, "Who is ignorant that the Regia, where Numa lived, was at the foot of the mount of Romulus (Palatine hill) at the end of the Forum Romanum?" Plutarch, *Numa*, 14, says, "Numa erected a royal palace called the Regia, near the Temple of Vesta, where he passed most of his time." Ovid, *Tristia*, III, i, 30, speaks of it as a small edifice. "This was the little palace of the ancient Numa." This little palace has been found occupying the space between the Temple of Vesta and the Sacra Via in front of the Temple of Antoninus Pius and Faustina, having its north side of 63 feet parallel with the Sacred Way. Its west side, towards the Forum, is 79 feet 10 inches. The south side, separated from the Temple of Vesta by a *vicus*, is 83 feet long; 20 feet of this at the south-west corner seems to have been an addition. The east side, which was the front, is 39 feet long. Thus it is shaped like a keystone—a very significant fact, for religion is the keystone of the state. On its west side was an open court, or Atrium, afterwards occupied by the temple-tomb of Cæsar, whose body was cremated in the Forum, "in front of the old monumental Regia of the Romans" (Appian, *De Bellis Civilibus*, ii, 42). "When (on March 6th, B.C. 12) Augustus was elected Pontifex Maximus he refused to use the Regia (House

of the Prince of the Temples) and gave it (in charge) to the Vestals, because it adjoined their temple" (Dion Cassius, liv, 27). This is confirmed by Suetonius, August 31st, and by Ovid, *Fasti*, vi, 263. "This little spot, which now supports the Atrium Vestæ, was in those days the vast palace of the unshaven Numa." It was, however, still called the Regia in the second and third centuries, and used for the transaction of religious affairs, the chapter-house (Pliny jun., *Ep.*, iv, 11; Plutarch, *Rom.*, 18, *Quæst. Rom.*; 97, Solinus, 1). "Now this had been the Regia of Numa Pompilius, but was convenient to the Atrium Vestæ, which had been remote from their temple" (Servius, *Æn.*, vii, 153). It escaped, or was restored after, the fire of A.D. 192, for the word REGIA occurs on a piece of the marble plan of Septimius Severus, and it is represented in the background of the relief in the Uffizzi of the Temple of Vesta, the south side having at each end a fluted composite pilaster (see frontispiece to *Rambles in Rome*). A piece of a moulded base exists at the north corner, part of a fluted pilaster on the travertine pier on the west side, one of its capitals has been recently built into the shrine of Mercury, and two pieces of the entablature are opposite the east corner.

The original construction of Numa—squared blocks of tufa stone—exists on all four sides.

In 211 B.C. a fire broke out at the *septem tabernæ* and the Atrium Regium was destroyed (Livy, xxvi, 27). It was rebuilt next year (Livy, xxvii, 11). Julius Obsequens, a fourth century recorder of ancient prodigies, relates, that in A.U.C. 606 (147 B.C.) "a fire ravaged Rome, when the Regia also was consumed; the Sacrarium (of Ops Consiva) and one of two bay trees were (saved) uninjured out of the midst of the flames." Professor Boni, the director of the excavations, has planted two bay trees at the entry. To this period we may attribute the *opus incertum* construction found within the tufa walls. It was again gutted by fire in 38 B.C. and rebuilt by Cn. Domitius Calvinus (Dion Cassius, xlvi, 42). The wall of *opus reticulatum*, the piers of travertine and the chamber with the mosaic pavement on the west side, and the travertine wall



THE REGIA FROM S.W., SHOWING REMAINS OF THE SACRARIUM OF OPS CONSIVA, THE PENUS, ETC.

inside the late steps on the north side are of this date. It was again destroyed in Nero's fire (Tacitus, *Annales*, xv, 41), and restored by Vespasian. The brick remains are of this date. It is to this period that the blocks of white Lunense (Carrara) marble belong; they have marginal drafted edges, but some of the drafts are cut irrespective of the joints to give the walls a uniform appearance, as in the marble walls of the Round Temple of Hercules, which is also of this date as it now stands. Carrara marble was not used in Rome before the time of Nero (Pliny, xxxvi, 4). The Regia was finally destroyed by the great fire under Maximinus in 238, and its area covered to the depth of 4 feet. Over this a later edifice was erected, of which remains exist, built of the old material, along the east front 19 feet in over the area of the Regia. The main entry into this edifice was from the Sacred Way, a frontage of 63 feet approached by a flight of marble steps along its whole length, three of these steps still existing, forming an angle with the original north tufa wall of the Regia. At each end is a base of red granite, the north one supporting a column of cipollino marble. Behind this column is a well, lined with tufa, a piece of *opus incertum* supporting some travertine, and marble of the late edifice. Thus all through the construction and the historical notices agree.

SACRARIUM OF OPS CONSIVA.

Within the west angle of the original edifice is an enclosure 34 feet long and 17 feet wide; inside this is a rectangular tufa platform 23 feet long and $13\frac{1}{2}$ feet wide, in the centre of which are two courses in tufa, red and brown, 1 foot 4 inches high, of a circular construction 8 feet 5 inches in diameter. I believe these are the remains of the shrine of Ops Consiva, the goddess of the seed-time, "the Sacrum of whom is in the Regia, into which no one but the High Priest and the High Vestal can enter." Varro, *De Ling. Lat.*, 5; Lucan, *Phars.*, v, 98, and ix, 994; Plutarch *Camillus*; and Ovid, *Fasti*, vi, 254 and 450, say that only the Vestals could enter. This seems most probable, for Ops Consiva

was their special goddess, and Ovid tells us that Metellus, before entering to save the sacred objects, appealed to the gods to forgive him. In it was kept the Palladium (Plutarch, *Camillus*; Lucan, *Phars.* ix, 994; Horace, *Ep.*, II, ii, 114); though Pliny, vii, 45; Valerius Maximus, I, iv, 4; Livy, v, 52, and *Ep.*, 19; and Dionysius, i, 69, speak of the Palladium being kept in the Temple of Vesta. By this title they probably embrace the whole group of buildings. Festus says, "The bronze vase without handles called *præfericulum*, used in the sacrifices, was kept in the shrine of Ops Consiva," and he identifies her with the Bona-Dea when he says, "The sacrificial knife, *Tecespita*, used by the higher grades of priests was kept in the shrine of the Bona-Dea." Both of these instruments are represented on a piece of the frieze belonging to the Temple of Vespasian, lying close by.

Ops as the Bona-Dea, the goddess of chastity, was specially venerated by the Vestals; in fact, the Vestal Claudia Quinta erected a temple to her on the Aventine 204 B.C. (Ovid, *Fasti*, v, 155). The altar, No. 25 in the gallery of the Capitol, has perhaps some connection with this temple. It was on the night of December 3rd, 62 B.C., when the secret rites of the Bona-Dea were being observed in the house of Cæsar, as prætor, "*In Sacra Via domo publica*" (Suetonius, *Cæs.*, 46), which adjoined the Regia to the east, that Clodius entered dressed as a woman, and "wandering about the great house" (Plutarch, *Cæs.*), was discovered. In 44 B.C., the year of Cæsar's murder, "the folding doors of the shrine of Ops were fractured, and the greater part of the roof cracked by the roots of trees" (Julius Obsequens).

THE PENUS.

The word Penus means that which is inside the house, also a store, a sanctuary. "The inmost covered place in the House of the Vestals is called the Penus. . . . The inmost place in the House of the Vestals, called Penus, which is often opened on certain days during the Festival of Vesta, which are religious days" (Festus). In the court on the north side of Ops Consiva is a sunken cir-

cular chamber 10 feet in diameter at its base, $14\frac{1}{2}$ feet deep, domed in with concentric overlapping rings of tufa, like the treasure chamber of the Temple of Victory on the Palatine. It was coated with a peculiar blue volcanic clay covered with white stucco. On a piece of the travertine coping-stone which closed it is cut the word REGIA. This was no doubt the sacred store-chamber where the first ears of the harvest were stored with which the Vestals made the *mola salsa* cake from May 7th to 14th (Servius, *Ecl.*, viii, 82). Within it was found a wooden writing tablet, on which probably the tally was recorded, eighty finely worked bone *stili*, some broken vases and bones. It was cleared out once a year on June 15th. When the late edifice was erected this chamber was converted into a rain cistern.

SACRARIUM MARTIS.

To the west of the Penus is a well of spring water 16 feet 8 inches deep, lined with blocks of tufa. To the north of the well is a small rectangular tufa base 4 feet by 4 feet 10 inches, upon which is cut a circle 2 feet 10 inches in diameter. Upon a loose stone is part of an inscription V · COVRL. I think that the circular marble altar now on the steps of the Temple of Jupiter Victor on the Palatine may have stood here. It is 3 feet $1\frac{1}{2}$ inches in diameter, upon a travertine base 3 feet 5 inches by 3 feet 4 inches, and would fit. It is inscribed—

CN . DOMITIVS . M . F . CALVINVS
PONTIFEX
COS . ITER . IMPER .
DE . MANIBIEIS.

This agrees with the fact that he restored the Regia with spoil of the Spanish war. He was consul for the second time in 40 B.C. If so, this is the altar of Mars which stood within the Sacrum where the spear of Mars was kept which shook just before Cæsar's murder (Dion Cassius, xliv, 17). "In the shrine in the Regia the *Hastæ Martiæ* moved" (Aulus Gellius, IV, vi, 1). He also preserves to us the Senatus Consultum made on

the occasion. Julius Obsequens records the spear in the Regia as moving in the years 116, 101, 97, and 94 B.C.

The off horse of the winning chariot in the race in October was sacrificed to Mars in the Campus Martius, and a contest took place between the Suburanenses and Sacravienses for the head. If the people of the Subura obtained it they placed it on the Turris Mamilia, those of the Via Sacra on the Regia. The tail was cut off and the blood was distilled in the fire, and with great quickness taken to the Regia (Festus). It was there preserved and used as a fumigation on the festival of Pales, April 21st (Ovid, *Fasti*, iv, 733). Plutarch, *Quæst. Rom.*, 97, says the blood was smeared over the altar of Mars in the Regia.

OFFICE OF THE CALATOR.

At the south-west corner is a wedge-shaped chamber below the level of the shrine of Ops Consiva, with the remains of a black and white mosaic pavement, the threshold of which is formed with a piece of marble, with the following inscription placed upside down:—

[Calat]ORES . PONTIFICVM . ET . FLAMINVM.

A list of names was found about here in 1788 (*Corpus Inscr. Lat.*, vi, 2184). Suetonius, *De Illustr. Gramm.*, 2, speaks of the *Calator* as an attendant on the priest. This was probably the waiting-room of those attending on the Pontifex. It is outside the original tufa wall, and was evidently an addition of Domitius Calvinus. There is another small chamber on its north side with walls of *opus incertum* and *opus reticulatum*.

THE LATE EDIFICE.

Trebellius Pollio, writing in the fourth century, says, "In short, there was at this time (A.D. 268) a statue at the foot of the mount of Romulus (Palatine); this is at the Arch of Fabius before the Sacred Way, between the Temples of Faustina and Vesta, upon which was inscribed 'Gallienus the younger.' Salonina (his mother) added since to his name, 'To him who excelled in intelligence'" (Saloninus, *Gallienus*, 1). Asconius, *In Verrem*, ii, 82,

says, "The arch, Fornix Fabius, is near the Regia, (which is) in the Sacred Way." The piers of this arch still exist on the south side of the temple-tomb of Cæsar, and behind it, to the east, the remains of the Regia have now been discovered bordering on the Sacra Via. Now if the statue of Gallienus the younger stood in the angle between the arch and Temples of Vesta and Faustina it must have been somewhere within the precincts of the Regia, and as Pollio does not mention the Regia we must conclude that it did not exist in his day, probably destroyed in the great fire of 238 (Herodian, 7 ; Capitolinus, *Maximin.*, 20), and when the property of the Vestals fell into the hands of the Church in 383 under Gratian, the very late edifice, the remains of which we have pointed out, was erected on its site and out of the ancient material. Part of an inscription exists built into the north wall of the chamber on the right-hand side of the eastern entry to the late edifice.

P . .
 . ELIO
 CESAR .
 . . . ANI
 . . . N

L. Ælius Cæsar was consul with P. Cælius Balbinus A.D. 137. He was adopted by Hadrian in 136 and died January 1st, 138. This is different in character from the Fasti series, and does not belong to them.

At the top of the vicus on the south side is a very deep well with excellent spring water. Many fragments of broken vases were found in it.

THE FASTI.

It is generally asserted that the *Fasti Triumphales* and *Consulares* were engraved on the exterior walls of the Regia, but this is not so ; the marble could not have withstood the various fires, the majority of the existing fragments of the Fasti dating from the time of Augustus. The records all connect the finding of these inscriptions with the Temple of Castor and Pollux, on the east and south sides, in 1547 and 1816. I saw other fragments

found in 1872 and 1879 by the temple-tomb of Cæsar. Panvinio, who was present at their discovery in 1547, says, "The first fragments were found at a ruined edifice which has the *form of an hemicircle*." The only ruin in the Forum that has this form is the Temple of Cæsar with the Rostra Julia in front of it, which is a hemicircle. The lofty platform of the temple of the deified Cæsar would be a most appropriate place for these records, of which I saw the first one found in 1872 in front of the Rostra Julia, where it remained for some years, and then was removed to the Conservatori Palace.

ROMVLVS . MARTIS . F . REX . ANN
 DE . CAENINENSIBVS . K . MAR
 MARTIS . F . REX . II

Ligorio, who was also present at their discovery in 1547, speaks of a building being destroyed for material for St. Peter's upon which were the Fasti, that many were broken up, and that then Cardinal Alexander Farnese stepped in and saved them, Michael Angelo building them into the wall of the Conservatori Palace of the Capitol, in such a manner as to represent the edifice from which they were taken. Ligorio says it took thirty days to destroy the building. This we could believe if the blocks had to be stripped off the podium of Cæsar's temple, but certainly not of the solid marble walls of the Regia, which in fact was then no longer existing, having been destroyed in the fire of 238. Ligorio gives a drawing (see Lanciani's *Ruins and Excavations*, 222) of the building he saw destroyed, which, however fanciful, in no way corresponds with the remains of the Regia now discovered. He calls it a *vero jano summo quatrifonte*, confusing it with the upper Janus of Horace, *Ep.* i, 1, which refers to a part of the Forum and not to a building. His drawing does not agree in any way with the relief and coins showing the Temple of Cæsar, but curiously enough it does somewhat with the Arch of Augustus erected adjoining the temple to commemorate the battle of Actium (Dion Cassius, li, 19; Maronis, Maii, and the *Mirabilia* all agree as to its site), as depicted on a coin of the Vinician family, so far that the arch is triple, the centre one being

arched, and the side ones horizontal with columns supporting a pediment (see Donaldson's *Architectura Numismatica*, 228). The façade erected by Michael Angelo is 24 feet long, composed of blocks of Greek marble, and they have not drafted edges. This does not agree with the blocks of Carrara marble found on the Regia site. This façade of 54 feet would not fit any of the sides of the Regia, and they do not represent the Regia as now discovered.

Owing to the recent heavy rains the Tiber has risen, and is backing up into the city through the drains. As I write this the Forum is under water, so we may again realise the flood described by Horace—

Vidimus flavum Tiberim retortis
Littore Etrusco¹ violenter undis
Ire dejectum monumenta regis
Templaque Vestæ.
(*Odes*, i, 2.)

FONS JUTURNÆ.

On the east side of the Vicus ad Capita Bubula, opposite the three columns of the Temple of Castor and Pollux, the actual spring or fountain of Juturna, the "deep pool" of Dionysius, was discovered in September, about 13 feet below the level of the vicus. In the centre of a well-house of the time of Tiberius, 44 feet from north to south, 30 feet east to west, rises a rectangular base 6 feet north to south, $9\frac{1}{2}$ feet east to west, 9 feet high, upon which probably stood the twin gods and their horses, as represented on a denarius of the Gens Postumia, struck by the consul A. Albinus 110 B.C., and of which broken fragments have been found, the actual springs being off the north and east corners. Surrounding this base is the pool, 4 feet wide on its eastern and western sides, and $6\frac{1}{2}$ feet wide on its north and south sides. On the north, south, and west sides of the pool is a ledge 5 feet wide, level with the top of the central base. The east side is partly covered by a blind arch $1\frac{1}{2}$ feet deep, but it has no ledge. On the other three sides, 4 feet above the ledge, is a travertine

¹ The right bank is in Etruria.

threshold $2\frac{1}{2}$ feet wide, then a platform of 5 feet to the enclosure walls. From the threshold to the bottom of the pool is 13 feet. The pool, base, and ledges were lined with white marble slabs, of which considerable remains exist. On the east side of the base, between it and the blind archway wall, the water space was divided off by a slab of white marble 4 feet 3 inches long by 3 feet 2 inches high, part of an inscription re-used—

POTEST XVIII
COLONIA . IV
TERTIA DECIA
VTHINA . EX
INDVLGENTIA . EIVS . AV

Within the pool was found an altar in peperino of the Republic, many terra-cotta vases of various periods, a well-preserved bust of Jupiter, fragments of a group of the Dioscuri, and a white marble altar 53 inches high and 18 inches wide. Upon the front face is a relief of Castor and Pollux, on the left Jupiter, on the right Leda and the Swan, and on the rear Vesta, with a long flaming torch in her hands. It is of the time of Tiberius, who restored the Temple of Castor (Suetonius, *Tib.*, 20; Dion Cassius, *lv*, 27), and probably the pool at the same time, the walls of *opus reticulatum* with which the ledges are constructed not being later than his period. The pool was originally 7 feet longer on its eastern side and was faced with blocks of tufa stone. There were no ledges. The coating of *opus signinum* which lined the west tufa wall can be seen between it and the filling in ledge of *opus reticulatum*. Behind the east side of the pool is a chamber 11 feet wide with a tank-bath $2\frac{3}{4}$ feet wide sunk in the floor, the east side of which is the original tufa wall of the east side of the pool. This chamber communicates with a shrine of Æsculapius, for the spring had some medicinal properties (Frontinus, *i*, 4), the tank being used by the patients. In this shrine were found mutilated statues of Apollo, Æsculapius, and Hygieia, which have been pieced together and placed in their niches. The base of the physician has a very indistinct inscription. Æsculapius has by his side the serpent and his son Telesphorus, who

is holding a cock by its wings in his left hand, and has a sacrificial knife in his right hand. The construction of this consultation room or shrine is of the time of Hadrian, *opus reticulatum* set in frames of brickwork; its floor, of *opus spicatum*, and that of the bath-chamber are level with the platform entering the well-house. The pool is shown on the piece of the marble plan of Rome found near this site in 1882.

To the south, more under the Palatine, a spring was found in August, about half-way along the side of the Scalæ Annulariæ (Suetonius, *Aug.* 72) with its *cippolo* marble well-head perfect. On its face is inscribed in characters of the time of Augustus—

M . BARBATIVS . POLLIO
AED . CVR .
IVTVRNAI . SACRVM
PVTEAL

The last word was added in the time of Hadrian. The inscription, without the last word, is repeated on the surface of the rim of the well-curb. Barbatius Pollio was quæstor to Lucius Antoninus 41 B.C. (Appian, *De Bell. Civil.*, v, 7, 31; Cicero, *13th Philippic*, ii). He was Curule Ædile under Augustus. We believe that whilst the pool was open to the public this spring was reserved to the Vestals, who supplied the sacrifices with living water (Tacitus, *Hist.*, iv, 53; Dionysius, i, 77). They used it daily to sprinkle and purify their temple (Plutarch, *Numa*, 13, where he confuses it with the fountain of Egeria, over a mile away; as does Servius, *Æn.*, xii, 139, with that at Laurentia, Statius IV, v, 35). It is 13 feet deep and 3 feet in diameter. In it were found broken terra-cotta vases of all dates, and a well-preserved Christian lamp of the third century.

In front of the well, but placed at a different angle, is a small altar of the time of Hadrian 3 feet by $1\frac{1}{2}$ feet, also of *cippolo* marble, standing on a platform approached by a wide step on its west side. On the face of the altar is a relief of Turnus and Juturna, for although she was the Italian goddess of spring, Virgil (*Æn.*, xii, 139) makes her the sister of Turnus.

Behind the altar and well is an *ædicula* or shrine,

11 feet long by 6 feet wide, raised 9 feet above the altar platform, with a curved apse at the end, with a base for a statue, probably the seated fragment now in the shrine of Æsculapius. Part of the architrave was found, inscribed—

I . V : T . : R N A I . S

Another piece is inscribed PEVIAE. These letters were filled in with bronze. A cippus was found bearing the inscription—

GENIO
STATIONIS
AQVARVM

part of another—

. . . R S E N V S . F O R T V N A T V S . V . C
C V R A T O R . A Q V A R V M . E T
M I N I C I A E .

This shrine is enclosed in a rectangular chamber of a different orientation. The group of rooms surrounding the pool and well formed a station of the city water supply for the eighth region or ward. Just before reaching the well is a pedestal of 328 A.D.

OPTIMO ET VENERABILI
D . N . F L . C O N S T A N T I N O
M A X I M O V I C T O R I P I O
S E M P E R A V G .
F L . M A E S I V S E G N A T I V S
L O L L I A N V S V . C . C V R A T O R
A Q V A R . E T M I N I C . D . N ¹ . M . Q . E

On the left side is—

DEDICATA . C V M . S T A T I O N E
A . F L . L O L L I A N O . C . V . C V R
K A L . M A R T I S
I A N V A R I N O . E T . I V S T O . C O N S S

The Porticus of Minucius consisted of colonnades, called *Vetus* and *Frumentaria*, erected 177 B.C. for the distribution of corn. Slight remains exist in the Piazza

¹ Minicius devotus numini.

Montanara. Part of it was destroyed in 1879 (Cicero, *2nd Phil.*, 34; Paterculus, ii, 8; Lampridius, *Commodus*, 16).

THE CHURCH OF S. SILVESTRO IN LACU.

On the site of the church of S. M. Liberatrice, destroyed in 1900, there was a church known as S. Silvestro in Lacu, commemorating the fight between Silvester and the dragon; and the spring of Juturna. This church was discovered in September behind the shrine of Juturna, which is erected against its north side, beneath the nave of S. M. Liberatrice. It is reached by a passage off the Vicus which leads into a court retaining traces of Christian frescoes. The church has more width than depth, and in the centre of the east end is a wide shallow apse with a most interesting fresco of the fifth century. A group of rows of about thirty almost life-size male figures are standing in a pool of water which reaches up to their knees; they have short kilts on, the upper part of their bodies being nude. To the right a figure is stepping up out of the water, to the right of whom are two soldiers, as if on guard. Probably this figure is Constantine; if so, this is the oldest representation of his baptism. Legend says he was baptised by Silvester at Rome, history that he was baptised at Nicomedia just before dying. Behind the neophyte and guards is a dark vaulted building from which flows an abundant stream of water into the baptismal pool, evidently intended for the Lacus Juturnæ, as though Constantine was baptised in it.

On the wall to the left of the apse are three large circles with a cross occupying the whole field, from which are suspended lamps. In the centre of the crosses were heads, the middle one only, of our Saviour, being preserved. Beneath the crosses are peacocks and sheep, emblematic of the immortality of the Christian flock.

On the north wall of the church are represented the figures of twenty-six saints in a row. All have the nimbus, which was not used in Christian art till the fifth century, alternately light and dark in colour. In the centre above the row of saints is a medallion portrait of Christ with a plain nimbus. The absence of the cross

in the nimbus shows the fresco to be not later than 550, the cross having been introduced under Justinian.

On the south wall the frescoes are nearly obliterated, but the scenes seem to represent the flight into Egypt (in a niche), and of other subjects on the wall one is a horse carrying an amphora by its side.

The floor is paved with small rectangular slabs of various coloured marbles.

The court and church were evidently one hall originally, the west wall of the church being built of old material across a large hall; this hall was the temple of the deified Augustus.

SOME DOCUMENTS RELATING TO THE PARISH
CHURCH OF ALL SAINTS, BRISTOL.

By E. G. CUTHBERT F. ATCHLEY.

The parish church of All Saints or All Hallowsen is situate near the centre of the old city, having now Corn Street on the north, All Saints Lane on the west, All Saints Court on the south, and two houses in High Street to the east. It consists of a nave and chancel, with a north and a south aisle. At the eastern extremity of the north aisle against the chancel rises a square tower, which was rebuilt in the first quarter of the eighteenth century, while the north aisle was rebuilt in 1782.

In the fifteenth century and up to the reign of Edward VI. there were, besides the high altar, four nether or low altars. In the north aisle, otherwise known as our Lady Aisle, or Jesus Aisle, stood the altar of our Lady, or Jesus altar; presumably in much the same position as is occupied by the unused modern altar now standing at the east end thereof.

At the east end of the south aisle, where now rests the monument to Edward Colston, the famous Bristol merchant, benefactor, and sound Churchman, stood the Rood altar; on the north side of which may still be seen "the little vestry door at the Rood altar end," mentioned in the churchwardens' accounts for 1472-73. The other two altars, dedicated the one to St. Thomas and the second to SS. John Baptist, John Evangelist, and Dunstan, perhaps stood one on either side of the entrance to the quire under the rood loft; at the church of St. Mary, Guilden Morden, Cambridgeshire, an arrangement of this sort appears to have obtained, and the enterclooses of the same are still there existing. This idea is borne out by the following extract from the churchwardens' accounts for 25th March, 1549 to 1550:—
"Jtem paid for whit-lymyng where the Rode Loft stode

and for stoping the holis and for brekinge downe the ij alters and for paving where they stode, iijs. iiijd." And it receives further support from an item in an inventory of the goods of Halwey's chauntry (founded at the altar of SS. John Baptist, John Evangelist, and Dunstan) dated 27th March, 1457: "Jtem a lytyll tye that stonde the be-twene the vecare & the seyd Awter." This would seem to place St. Thomas's altar on the north and St. John's on the south side of the quire door.

The west ends of both aisles of All Saints Church are encroached upon above, on the north by the house of the Fraternity of Kalendars, and on the south by the old vicarage. The present building over the end of the north aisle is quite modern, while only a doorway remains of the old vicarage, built by Thomas Marshall during the first quarter of the fifteenth century.

This brief description of the church will be sufficient for the due understanding of the annexed documents. All Saints Church has been lucky in having preserved intact the larger portion of its deeds, as well as its churchwardens' accounts from 1407 onwards with but few *lacunae*. Several deeds, which a century ago were still in the possession of the church, are now at the Bristol Museum, and a few more are in the collection of Mr. Francis Fox, of Chipping Sodbury.

The present series of documents has been selected from those extant at All Saints, to which a will from Mr. Fox's collection has been added.

The first of these is a grant by one Laurence le mercer of six pennies of silver of rent assize coming from some property in the parish of St. Peter, Bristol, and which one Richard Cox used to pay him annually, for the benefit of the lights at All Saints Church. This rent assize was granted to Laurence le mercer by a lady of the name of Alicia Mansel not very long before he gave it to the church. Both grants are without date, but from the names of the witnesses, three of whom witness both deeds, it is certain that they belong to the middle of the thirteenth century. Of those three, one is Stephen de Gnoushale, vicar of All Saints and Dean of Christianity of Bristol. In the fifteenth century the deeds were catalogued in a large book still extant, and

the endorsement of the deed (in the same hand as the entry in the above-mentioned book) tells us that the rent came from William Canynges' house in St. Peter's Street, and that at the time of the entry in the book one John Steyner lived in it. It was probably the "large tenement with fourteen shops opposite St. Peter's Cross, between the shops of our lady the Queen (which Simon Olyver lately rebuilt), and a lane called the *Strete of Defence*" which was bequeathed by William Canynges in 1474 to his heirs.

The next document, or rather documents, are two of the "evidences under authentic seals," out of the original twelve, for 12s. rent assize from a house in Baldwin Street, granted to the church by a William Newbery, whose obit was kept yearly on the 10th of May. The churchwardens' accounts furnish us with evidence of the date of the bequest. The first appearance of this 12s. is among the Receipts of Rents in the computus of Thomas Fyler and William Haytfeld, brought before Sir Thomas Marshall, vicar, on the last day of March, 1427, 2 Henry VI. There is a discrepancy between the regnal year of Henry VI. and the reckoning anno Domini. Henry began to reign 31st August, 1422, so that 31st March of his second year would fall in 1424, and 31st March, 1427, was in his fifth year. The accounts-book does not help us, for the preceding computus is dated only 1 Henry VI.; and the succeeding, 1428, without the regnal year. However, in this computus we find the receipt "of Nycholas Hoper yn Baldwyn strete, xij s."; and the payment "Jn primis for Wylliam Newbery-ys Mynd, iij s. j d." also for the first time. So that he died on 10th May, either 1423 or 1426.

Howel, a son of Worgan, archdeacon of Llandaff, and his wife Cecilia, a daughter of John La Warre, grant to William, son of David de novo burgo (or Newbury), a certain property in the parish of All Saints, Bristol. The name of the street wherein it lay is not mentioned, but the names of the owners of the bordering properties are given. William Newbury has to pay 24s. yearly for the same to Howel and his heirs, as well as 3½d. a year ground rent to the head-lord of the fee. William and his heirs may sell or give or convey it to anyone, with

the exception of religious (*i.e.* monks, canons, friars, and the like), and Jews. If it is sold, 12*d.* silver is to be paid to Howel or his heirs. Amongst the witnesses is one Griffin, son of the archdeacon. Another copy in paler ink only differs in that it is made out in the name of Cecilia alone, and is witnessed by one different witness.

This grant has been frequently quoted, and assigned to various dates. The only archdeacon of Llandaff called Worgan appears to be one more commonly called Urban, who was consecrated bishop of Llandaff in 1104 by St. Anselm. The handwriting of the deeds is more like that of the reign of Henry III. than Henry I. Messrs. Nichols and Taylor in their *Bristol, Past and Present*, identify the William Newbury of the deed with the person of the same name who gave the property to the church, and suppose the two deeds to have been written a little before 1370. Howel and Cecilia they think were Wiclifites, alleging in proof the proviso against selling the property to religious and Jews, the fact that Howel was an archdeacon's son, and that one of the witnesses was another. William Newbury they say died in 1414. The origin of this seems to be an item in the receipts for the year 2 Henry V., which ended 19th March, 1415: "Jtem of Wylliam Newbery for j by-Qwest, xx s." Their remarks on married priests show little acquaintance with the facts; a little reading of Gerald du Barry on his own countrymen would have shown that, more than two centuries before Wiclif, married clergy abounded in Wales; indeed, one may almost say that at no time in England would it have been impossible to find a certain number of married priests, at any rate up to the time when Cranmer so ardently set about enforcing the Six Article Act.

The will of Alice, widow of one William Halye, is extremely interesting; the numerous legacies give us some idea of the household goods of a well-to-do merchant family in the middle of the thirteenth century. There do not appear to have been any children of the marriage, at least none are mentioned. After expressing her desire to be buried in the churchyard of All Saints, she bequeaths small sums of money to the high altar of

that church, to Sir William the chaplain, as well as the deacon and subdeacon, more frequently called in later documents the clerk and his suffragan. Her arrangements for her funeral include 3s. to be spent on drinks for the clergy. Her house in High Street, opposite the Drapery, she left to the church of All Saints, for the perpetual assistance of the lights burning before the high altar at the Lady-mass in the same church. She also left a towel for the benefit of the service of St. Mary there. This house, or another on the same site, was at a later period called "the Green Lattice." Her bedding was distributed amongst the vicar of All Saints and her past and present servants, consisting of a feather mattress, several feather beds, sheets, bolsters, and pillows or cushions. Three lady friends receive small gifts—a little coffer, and two towels. A silver bowl or cup, and a cow, a heifer, and a bull-calf in the care of Adam Delby at Leigh, were to be sold to pay her debts, together with a number of other unbequeathed articles.

It may be inferred from this will that the north aisle of the church had not been built at this period, as the Lady-masses were said at the high altar.

John of Yate gave 3s. annually out of a piece of land 9 feet 6 inches wide and 29 feet long, next the churchyard, the building standing on which in the fifteenth century is described as the corner house next the conduit (which is now at the west end of the church), towards the service of St. Mary in All Saints Church, besides 2s. towards the maintenance of a lamp burning before the altar of St. Margaret in the same church. This is the only reference to this altar which I can find, and it seems to have been non-existent in the fifteenth century. The Kalendars benefited to the extent of 8s. a year out of the same property.

In 1303 one Roger the girdler, a parishioner of All Saints, gave to the church a magnificent pix wherein to reserve the Eucharist at the high altar, and to carry it to the sick in visitations. This ornament is described as a large goblet with a cover, made of silver, and gilt within and without, having a crucifix standing upon it, also of silver and similarly gilt; and resting on a long foot adorned with precious stones, also gilt; the whole

weighing as much as 67 shillings of silver. Inside this lay a small box fashioned like a cup, and weighing as much as two shillings and six pence of silver. A spoon seems to have been added to the gift at a later period, as the vestry book and the endorsement of the deed of gift mention "the Cowpe, the Cuppe, and the Spone," and the combined weight is given in the record of the benefaction, and in the inventory of 1464, as 45 ounces. And as a protection the donor requested the then vicar, Sir William Schoche, to anathematise all and any who should alienate or break up the said pix: and for the still greater safety, the Dean of Bristol was asked to put his seal also thereto.

When William Lenche and Stephen Knyght, proctors or churchwardens of All Saints, retired from office on the 5th March, 139 $\frac{5}{8}$, they drew up in the form of a pair of parchment indentures, 38 cms. long by 16 cms. wide, an inventory in Latin of the church goods which they handed over on that date to their successors. Later comers have made alterations, corrections, and additions, which will be found duly recorded in the notes to the list.

This inventory is the more interesting as it appears to be the original on which was based the English inventory of the same date, which is recorded in the fifteenth century vestry book and entered therein about the year 1460. This vestry book was compiled and made, as we read on p. 83 of the volume, by Sir Maurice Hardwick, "for to be j memorial & j remembrance for ever for the curates and the churchwardens that shall be for the time, that every man to put in yearly his accompt for j evidence of the livelihood of the church: and for to put in Names of the Good-doers, and the names of the wardens of the church, and what good they doeth in their days, that they may yearly be prayed for. And Sir John Thomas helped too, and wrote this book." Hardwick was vicar from 1455 to 1472, while Sir John Thomas came in as vicar in 1479.

The inventory is not divided into groups by any headings, but in the left hand margin the division into sections is noted by the sign "-". It enumerates first the books, then the ornaments of the ministers, followed by

those of the altar and other parts of the church ; a list of the church plate and some various church implements conclude the original list, which is augmented by sundry ornaments added later. The additions vary in the two copies.

There was not a very large number of books :—Two mass books, one described as old, and the other seemingly identical with the *missale de usu sarum* bequeathed in 1270 by William Selke, Vicar of All Saints. Six grails, two of them possibly given by Selke, one for the Lady-mass, and another abridged. A manual, also probably given by Selke, and a martiloge or martyrology, four breviaries, of which two were half-portueses, two antiphoners, both old, four psalters, and three legends, two of the Temporale and one of the Sanctorale, were for the quire offices.

An ordinal, probably given by a former vicar, William Isgar, in 1321, completed the set.

Nor are the ornaments for the ministers very numerous. Two complete suits, both of ciclatouns, the best being coloured green and blue ; five vestments, one black, one white, and three red, apparently including under that term stole, fanon, alb, and apparels ; there were also five chasubles of cloth of gold, and black and white, red, or yellow silk. Besides these there were two tunicles to match the cloth of gold chasuble, in addition to two others of the same fabric but different set. There were only three copes apart from those presumably included in the suits above mentioned, for the use of the clergy ; but the list mentions two copes and two albs for boys that cannot have been very large, as altogether they were only valued at 3s. 4d.

For the adornment of the high altar there was a frontal painted with the representation of the Trinity, and an overfrontal similarly painted with the coronation of our Lady, and two riddells with angels on them, and the iron rods to hold them up. No other frontal is mentioned, not even for one of the low altars, unless the two *frontella* of red silk with fringes of silk are frontals and not frontlets. The usual linen cloths to lay on the altar, some with frontlets or apparels, and some without, are mentioned. The cloth, which was used to cover the Pix

over the high altar—at any rate used for that purpose at the time the English version of this inventory was written—was of black velvet with a red fringe. The Lent veil was striped blue and white. The Lent cloth for the crucifix was painted with the Passion, *i.e.* with symbols of the Passion, and there were four other white buckram cloths with red crosses on them, which in the English version are called Lent cloths for altars.

For the image of the Madonna and Child in the chapel (? the north aisle) there were two mantles of red satin with four gilt buttons, and the same number, but with only three gilt buttons, for a similar image “in the pillar,” as well as a checker-velvet mantle for the image of the Child. For the image of St. Anne, “in the pillar,” there was a mantle of red satin with three silver buttons. In the English version these garments are differently distributed.

The plate includes a silver gilt pix and cup, probably that given by Roger the Girdler, an oil-vat or chrysmatory, three chalices, a bason and ewer, two censers, four pairs of pewter candlesticks weighing 40 lbs., and two others; four hand-bells, and two others—of which one is said to be for the high altar in the English version, to ring just before the sacring. There were also two long wooden candlesticks, and an old iron one which was probably given by Selke in 1270 for use at funerals.

Besides two desks, one of which was for the high altar, there was an eagle-desk gilt, probably to be identified with the wooden eagle bequeathed by Selke.

Amongst the ornaments added after the drawing up of these indentures were two banners for Rogation processions, two crosses and two cross staves, two pairs of cruets, a cloth of gold hanging for the Easter Sepulchre, and another cloth with four soldiers painted on it, evidently for the same purpose. Other ornaments were a frontal for the high altar for Lent, and a Lent veil with a “pitee” (Our Lady of Pity, or Our Lord’s Pity?), a castle with four angels for the cross and a pair of shoes for St. Dunstan.

The next document is an example of a royal licence to evade the Statute of Mortmain, so as to allow of the endowment of a lamp to burn before the high altar of All

Saints. It was customary to have a light burning before the Eucharist hung over the high altar in reserve for the sick, although there was no obligation to do so¹ unless the means of the church were sufficient. Its introduction into England appears to have been largely due to the preaching of Eustace, Abbot of Flay, in the year 1200 A.D. The present licence was issued on 16th January, 20 Richard II., 1399.

Our last document belonging to the mediæval period is remarkably interesting. Sir Thomas Wheton, rector of the church of SS. John Baptist and John Evangelist, was appointed commissary for the Bishop of Worcester, in whose diocese Bristol then was, to inquire into an alleged pollution of the church of All Saints. There had been something very like a free fight in the church, in consequence of the attempted arrest of a strange priest who was suspected of misappropriating certain things that belonged to other folk, and rumour had it that blood had been shed, in which case all services would needs be discontinued until the building had been reconciled.

The evidence at the inquiry showed that the stranger entered an inn near All Saints, and had some refreshment ; after which, seeing that "the servants of our lord the king" were in wait for him outside, to avoid being laid by the heels, he took his departure by another door, and bolting into All Saints Church, secretly entered the vestibule, in the vain hope of thereby eluding his pursuers, who are somewhat quaintly called "his enemies." They, however, soon got wind of this manœuvre, and shortly afterwards a bailiff rushed hurriedly into the church just as they were beginning the psalm *In exitu Israel* at Sunday evensong, and (most improperly) strode into the quire, and hauled the offending cleric out by the shoulders, using considerable violence. The vicar, seeing this, in the interests of the cloth, tried his level best to obstruct the officer, but was not strong enough, so Sir John Prince, one of the chaplains, actuated solely and entirely by feelings of reverence, came to the vicar's aid, and gave one of the bailiff's men one or two manly blows with his

¹ There was but rarely more than one light before the reserved Eucharist. See *Some Principles and Services of the*

Prayer Book historically considered, edited by J. Wickham Legg, London, 1899; p. 32.

fist. Next a lettered layman, who was standing in the quire amongst the chaplains, joined the scrimmage, not in any wanton or angry mood, but merely in the interests of peace and quietness (like Mr. Prince) and a desire to separate the fighters; and quite accidentally chipped a piece of skin off somebody with the pin that fastened the little cross on the cover of the book which he was holding in his hand. It was but a small book, and no bleeding followed. The court unanimously believed this story and decided that no pollution had occurred. One would have liked to have known more about the fight, who had the best of it, and how that man of "apostolic blows and knocks," the Rev. John Prince, further disported himself. Evidently the athletic parson is not a product of modern times.

The inventory of the church goods of All Saints in 1619 is an example of the neglect of the plain provisions of the ornaments section of Elizabeth's Act of Uniformity. The plate is represented by a communion cup and its cover, more commonly now called the chalice and paten, a present pottle pot and a quart pot (the *flagons* of our rubric) and some candlesticks. The ornaments of the altar are but two table-cloths, and three carpets, as frontals used to be called at that period (compare the 82nd canon of 1603); while the books were represented by four bibles, the inevitable paraphrase of Erasmus, four communion (*sic* for common) prayer-books, and a book of Homilies, Canons, and Articles. The ornaments of the minister have been reduced to two surplices. A brass eagle for reading the lessons, a hearse cloth of black velvet, and a pulpit-hanging or preaching-cloth and a blue velvet cushion and an hourglass for the pulpit are the chief ornaments of the church besides those already mentioned. There were a number of cushions, twenty-four in all, besides that for the pulpit, and two "in the ministers pew": their purpose is not indicated.

In transcribing these documents all expansions of the contractions of the original MSS. have been notified by the use of italics, excepting that of *th* for the thorn.

I have to thank the Rev. H. Boustead, vicar of All Saints, Bristol, and Mr. Alderman F. F. Fox, for affording me every possible facility for transcribing these manuscripts.

APPENDIX.

SOME DOCUMENTS RELATING TO THE PARISH CHURCH
OF ALL SAINTS, BRISTOL.

I.

ENDOWMENT OF THE LIGHTS.

*Both are endorsed Wylliam Canynges yn seynte
petyr ys strete, vjd. ij-peces. in the same hand
as the original hand of the fifteenth century
book of Records and accounts preserved in
the church, compiled and made by Maurice
Hardwyk, and written by John Thomas.*

1). Sciānt presentes & futuri Quod Ego Laurentius
le Mercer dedj. concessi. & hac presentj Carta mea
confirmāuj deo & beate Marje & omnibus sanctjs ad
Lumjnare Ecclesje Omnjum sanctorum de Bristollia.
Jllos sex denarjos argentj reddjtus assisi quos Ricardus
Cocus michi annuatjm reddere consueujt de terra illa
cum edificijs & pertinencijs suis in villa Bristollie in
parrochia sanctj Petri que jacet inter terram que fujt
Robertj de Thornbire ex parte orjentalj. & terram que
fujt Cecjlje Pollard ex parte occjdentalj. Habendos &
percipjendos dictos sex denarios reddjtus assisj. de
predicta terra cum edificijs & pertinencijs sujs. ad
Lumjnare dicte Ecclesje Omnjum sanctorum ad duos
annj terminos. scilicet ad Pascha. tres denarios. & ad
festum sanctj Michaelis. tres denarjos. libere. &
quiete. pacifice. & integre in perpetuum. Ego uero
dictus Laurentjus Le Mercer & heredes mej. dictos.
sex. denarios argentj reddjtus assisj. ad dictum
Luminare dicte Ecclesje Omnjum sanctorum de
Bristollia. contra omnes mortales in perpetuum
warantjzabjmus. Quod ut Ratum & stabile in per-
petuum permaneat. presentem Cartam sigillj mej
impressione roborauj. Hijs testibus. domino Stephano
de Gnoushale tunc decano de Bristollia. Paulo de
Corderia. Martino de corderia. Waltero de monte.

Roberto Pjkard . Ada Snel . Regjinaldo Golde . Reginaldo le Costriler . Johanne de Templo Clerico . & alijs.

2). The second is a similar document granting to Laurentius le Mercer the six pennies of silver, by Alicia Mansel. Witnessed by "Domino Stephano vicario Ecclesie Omnium sanctorum de Bristollia . tunc Decano christianitatis Bristollie . Martino de la Ropselde . Reginaldo Le costriler . Ricardo Coco . Gregorio Clerico . Johanne de Templo Clerico . & alijs."

Neither of these bears any date : each has the slit for the seal but no seal attached. The handwriting appears to belong to about the middle of the thirteenth century.

Of these persons, **Alicia Mansel** filia Manselli executed a quitclaim *in crastino translacionis beati Martini Anno domini M. CC. xl viij^o* (No. 163 in the collection of deeds at Bristol Museum Library), concerning 4d. rent assize that she had inherited from her father, and which Henry Ailward used to pay for the land near the causeway leading to Beggereswelle, in Redland, between land that was H. Ailward's and that was John le Seler's : witnessed by William de Watford, William Seuaire, Reginald Bathoniensis, etc. A grant (undated) by Ysolda, relict of John Selarius, to St. James's Church (No. 51, Br. Mus. Lib.) of some land near the new Frome gate which had belonged to Radulf Cornubiensis, and she bought from James le Warre, between land that was Peter la Warre's, and that was William le Gulde's : is witnessed by **Sir Stephan**, then Dean, Sir John, parson of Holy Trinity, and Sir John de Echemstude, then chaplain of St. James, Helyas Aky, Reginald Bathoniensis, and some others. A grant in a bound volume entitled *Collection of Original Leases, &c.*, at the same Library (p. 22) is witnessed amongst others by Thomas, vicar of St. Werburg's, and **Stephan**, vicar of All Saints, also undated. William Selk, chaplain, granted in free alms to All Saints for the support of a lamp to burn in the church by night for the benefit of the souls of himself, his father John, and mother Isabel, and all his predecessors and successors, those 2s. of silver of rent assize which he bought from Robert de Kerdif of that land in Scadepulle in the suburbs of Bristol and the parish of St. Stephan (No. 160, Br. Mus. Lib.). It is witnessed by **Paul de Corderia**, Robert Turtle, **Reginald Golde**, **Walter de Monte**, and **John de Templo**, clerk. Ysolda, relict of Hugo de Caluestone, granted to William Selke, rector of All Saints, that land in Scadepulle between lands that were Thomas Long the tanner's, reaching back to the Lagedich : witnessed by Henry Adrian, mayor : William Seuaire and Hugo Michel, *prepositors* : Roger de Bercam, **Paul de Corderia**, William de Bruges, John de Yate, William de Malmesbury, Philip Frend, Walter de Seltelbury, William Lif, John Scrinarius, and Richard Scrinarius (No. 168, Br. Mus. Lib.). Thomas Le Teler de Caluestone granted quitclaim to William Selk, rector of All Saints, of all his rights that he had or might have over that land in Scadepulle Street (described as above) : witnessed by Symon Clerk, mayor : Roger de Cantoc and William de Berewyke, *prepositors* : **Paul de Corderia**, **Walter de Monte**, **Reginald Golde**, John de Yate, Thomas de Bercham, Philip Froent, William de Malmesbury, Nicholas de la Marine, John Russel, William Lyf, John Scrinarius, **John de Templo**, clerk (No. 24, Br. Mus. Lib., two copies, sealed with one seal each, bearing a rough fleur-de-lys, and S' THOME LE TELER around). Robert de Kerdif, son and heir of Robert de Kerdif, granted the 2s. silver of rent assize which Hugo de Calueston used to pay for that land in

Scadepulle (described as above) to William Selk, rector of All Saints : witnessed by same mayor and prepositors as No. 24, and by most of the others (No. 79, Br. Mus. Lib.). **Stephan de Gnohusal**, rector of the church of Filton, when Hugo Kiet in his last will bequeathed 12d. of silver of rent assize to the support of one lamp to burn daily before the altar of Holy Cross at All Saints out of the land near the All Saints cemetery lying between land that was Elye de la Redelonde on the north, and that was Peter de Wygornia's on the south, and extends back to that that was Thomas Le Cordewaner's, and said Stephan afterwards took the same *in feodum et hereditatem* ; granted freely and purely by himself his heirs and assigns, the same 12d. payable at Easter and Michaelmas. Witnessed by Symon Clerk, *mayor* : **Henry Adrian** and **Martin de Corderia**, *prepositors* : **Paul de Corderia**, **Walter de Monte**, **Adam Snel**, **Reginald Golde**, **Richard de Calna**, **John de Yate**, **Richard Flaonchaut**, **Nicholas le Cuppare**, **John de Templo**, *clerk* (at All Saints, endorsed the Almays house xij.d. ij Erydens, undated). **Paul de Corderia** granted to his daughter Margery all that land that was Aylric Drapar's near the *Corderia* and extending back to John Monk's land, viz., a moiety of the land between the said *Corderia* and that that was Martin Drapar's (of which land John Blund *parmentarius* holds another moiety) ; 3 marks yearly to the headlords, viz. to Richard Juuenis 6s. 8d., to Elene relict of William Fitz-Nicholas 2s., and the prioress of Kyncton 16d. ; witnessed by **Reginald de Panes**, *mayor* ; **Sanekyn Reneward** and **John Clerk**, *prepositors* ; **Robert Turtle**, **Walter de Montibus**, **Richard de Calna**, **Henry de Reyni**, **John de Yate**, **John Plumbarius**, **Nicholas Martin**, **Radus Salsarius**, **John de Templo**, *clerk*. A copy made after 5 June, 3 Edw. II., of the following deed is preserved at All Saints : Hawisia, wife of Peter de Wygornia, confirmed to Richard de Calna the grant made to him by her husband, fortified by a Curse, sealed by Gilbert then dean of Bristol, and **Stephan de Gnohussale** then vicar of All Saints, dated 1254 *circa festum sancti Eadmundi Regis* ; witnessed by **Paul de Corderia**, **Martin de Corderia**, **Robert Pikard**, **Adam Snel**, **Walter de Monte**, **Reginald Golde**, **William Halye**, and **John de Templo**, *clerk*.

Henry Langbord, son of **Henry Langbord**, granted to **Walter de Panes** some land in Wortheshipestrete ; witnessed by **Reginald de Panes**, *mayor* ; **Roger de Cantok** and **John de Lydjard**, *prepositors* ; **Simon le Clerc**, **William de Bjaumond**, **Robert de Kylmeynan**, **Radulph Bjaufur**, and **John de Templo**, *clerk*. Margery daughter of William de Albedeston, relict of **Walter Clerk**, granted that tenement in Wurtheschipestret that had belonged to **Robert Pultram** to **Walter de Panes** ; witnessed by **John Wyssi**, *mayor* ; **Roger de Cantok** and **William de Berewyk**, *prepositors* ; **Simon Clerk**, **Henry Adrian**, **Reginald de Panes**, **Thomas Maylleden**, **Alexander le Denesmey**, **William de Ochampton**, **Laurence de Harpetre** and **John de Templo**, *clerk*. Both these are at All Saints. **John Wissy** was mayor in 1272, according to Ricart.

Cecily Pollard executed a deed in the time of **James la Warre**, *mayor* (1236), and founded a chauntry in the parish church of St. Lawrence, Bristol, according to two deeds at SS. John Bapt. and John Ev., Bristol (Nos. 69 and 19 in Mr. Latimer's MS. calendar).

William Selke was vicar of All Saints when he made his will in 1270 (*Trans. Bristol and Glouc. Arch. Soc.*, 1890-1 ; xv. opp. 314). **Symon Clerk** was mayor in 1268, and **Henry Adryan** in 1254 and 1265, according to Ricart ; while **William Seure** and **Hugh Mychell** were prepositors in 1254. **Roger de Berkham** was mayor in 1257. A **Reginald de Penes** was mayor in 1247, but the prepositors are not the same in the deeds as in Ricart : another **R. de Panys** was mayor in 1314, but the bailifs (who are the same as prepositors) are still different.

It is evident from the names of the witnesses that these two deeds must belong to about 1245 to 1255.

There was a tenement still called "le Ropeseld" in High Street in 33 Edw. III. (MS. deeds, No. 111, *Brist. Mus. Lib.*): in 1393, mentioned in the will of Joan Stoke (T. P. Wadley, *Notes . . . of the Wills . . . at Bristol*, Bristol, 1886; p. 41); and in 20 Hen. VI. (deed by John Fitzwarryn clerk, and Thomas Norton gentleman, to Thomas Hallewey, &c., A.D. 1442; at All Saints).

From the endorsement of these two deeds it appears that the property was situate in St. Peter's Street, and that, at the time of the endorsement in the third quarter of the fifteenth century, it belonged to William Canynges. It was probably the large tenement with fourteen shops next to the Street of Defence which he mentions in his will (George Pryce, *Memorials of the Canynges Family*, Bristol and London, 1854; p. 264).

II.

Endorsed Baldewynn strete in the same fifteenth century hand: and High street E | 2 | in a hand of about the end of last century.

Sciunt presentes & futuri quod Ego Howellus filius Worgani Archidiaconi de Landaf & Cecelia vxor mea filia Johannis La Warre. dedimus & Concessimus & hac presenti carta nostra confirmauimus Willelmo filio dauit de nouo burgo. totam illam terram nostram cum pertinentiis in parochia omnium sanctorum Bristolie que iacet inter terram que fuit Eue le Huclagh & terram que fuit Walteri filii Thome de monte. que quidem terra tenet in fronte Septemdecim pedes de Latitudine. Et extendit se in Longitudine a vico antierius. usque ad terram qui fuit Petri de Oxonia posterius. Habendam & tenendam totam illam predictam terram c m omnibu edeficiis & pertinentiis suis eidem Willelmo & heredibus suis uel assignatis suis de nobis & heredibus nostris in feodo & hereditate libere & quiete. plenarie. pacifice. & integre in perpetuum. Reddendo inde annuatim nobis & heredibus nostris ipse Willelmus & heredes sui. uel sui assignati. viginti & quatuor solidos esterlingorum ad quatuor terminos anni. scilicet ad festum sancti Michaelis sex solidos. ad Natale domini sex solidos. ad Pascha sex solidos. ad Natiuitatem sancti Johannis Baptiste sex solidos. Et Capitali domino feodi illius tres denarios et tres quadrentes per annum de Landgabulo¹. pro omnibus seruiciis. querelis. exactionibus & demandis

¹ A quit-rent for the site of a house, the same as ground-rent.

ad nos & ad heredes nostros pertinentibus. Et licet predicto Willelmo & heredibus suis & assignatis suis totam predictam terram cum omnibus edeficiis & pertinentiis suis dare. vendere. inuadiare. uel excambire. cuicumque uoluerint. preterquam viris religiosis. & Judeis. saluo supradicto redditu nostro per annum. Set si eam vendere voluerint. erimus nos inde inde (*sic*) proprios omnibus aliis de duodecim denariis argenti Ita quod venditionem illam impedire non poterimus. ultra proximos Quindecim dies postquam nobis oblata fuerit. pro hac autem donatione. & Concessione. & presentis carte nostre Confirmatione. dedit nobis predictus Willelmus decem solidos esterlingorum. de interitu. Quare nos et heredes nostri warantizabimus dicto Willelmo & heredibus suis & suis assignatis totam predictam terram cum omnibus edeficiis & pertinentiis suis contra omnes homines & feminas inperpetuum per predictum seruitium. Quod ut Ratum & stabile inperpetuum permaneat. presentem cartam sigillorum nostrorum inpressionibus Roborauimus. Hiis testibus Willelmo filio Arthuri. stephano de la hammo. Randulfo persona de Clopton. Griffino filio Archidiaconi. Henrico Luuel. Ricardo de la Hamme. Roberto Rosely. Waltero de Caerdif. Ricardo filio eius. Jordano de Caerdif. Waltero filio eius. Randulfo aurifabro. Johanne clerico. & aliis.

Another deed, only differing from the above in that it omits the name of Howel, son of Worgan, and has instead of the last witness "Thoma le scot," and only one tag for a seal, is preserved at All Saints and endorsed E | 1 |.

Two seals are attached to the above: (1) circular, about 22 mm. across having in the centre a triangular shield on which can be made out a cross tau fusilly (?), and around the edge is inscribed ✠ SHOVALDI FILII ARCHIDIACONI: (2) was elliptical, but now is much broken: in the middle is what appears to be an aspergil or springel, for sprinkling holy water.

I cannot find any definite record of an archdeacon of Llandaff called Worgan. In the *Brut Y Tywysogion* (Rolls Series, 1860; p. 81) under the date 1104 A.D. we are told that Herwald bishop of Llandaff died and was succeeded by Worgan, who was consecrated in Kent by Archbishop Ancellin. In the annals of Margan (*Annales Monastici*, Rolls Series, 1864; j, p. 8) we are told that he was succeeded by Urban, who was consecrated by Anselm. From T. D. Hardy's edition of Le Neve's *Fasti Ecclesie Anglicane* (Oxford, 1854; ij, 241, 258) it appears that this Urban had been archdeacon

M

of Llandaff. If he is the Worgan referred to above, it follows that the deeds were drawn up before 1104 A.D.: and the names of the witnesses have an early appearance. The authors of *Bristol, Past and Present*, suppose it to have been written "a little before 1370," and that Howel and Cecilia were Wiclifites. They identify the William Newbury of the deed with another man of that name who died in 1414, and bequeathed 12s. rent assize from this property to the church. But that is improbable, though the handwriting looks more like that of the second quarter of the thirteenth century than the beginning of the twelfth. There was a Walter de Monte living *circ.* 1250 (see notes to preceding, and the following).

The family of **Hamme** are named in some documents at All Saints. 1. Philip Deuenyssh of Bristol grants to Peter de Hamme a certain rent from a messuage in Lewynnesmede, 32 Edw. III., witnessed by Reginald le Frensh, *mayor*; Henry Viel and John Sore, *baillifs*: Michael Gode and Walter Kelb, *seneschalls*; and eight others. 2. Will of Peter Hamme, weaver, 12 November, 1377. To be buried at the Blackfriars; 6s. 8d. to fabric of parish church of St. James, Bristol; tenement in Lewins Mead and all his goods to wife Edith: she and Nicholas Hastynges to be executors. Proved before the dean of Bristol, 23 November, 1377, and before Thomas Beaupyne *mayor* & Walter Ted[?] *ricecomes*, Convers. St. Paul 1 Ric. II. Seal of Deanery and mayor. 3. Will of Edith Hamme, widow of Peter Hamme, 14 November, 1382: to be buried in the cloister of the Blackfriars of Bristol near late husband; 12d. to fabric of Worcester cathedral church, 6s. 8d. to that of St. James, Bristol; 2s. 6d. each to Greyfriars, Whitefriars, and Austinfriars of Bristol, and 6s. 8d. to the Blackfriars: 40s. for funeral expenses; 10s. to John Botelere, weaver; to elder son John a *ras* of lead *pro seruicia imponenda*, a large chest with lock and key, a "biffet," one pair of sheets and 2 blankettes" and one brass pot containing "iiij lagonn"; to friar John my younger son a principal coverlet, 2 pair sheets, another striped coverlet, a better tablecloth with a towel (*manutergium*), a bason with a ewer (*lauatorium*), 6 plates, 2 "chargeres," 5 "sauceres," of tin; 4s. to Agnes wife of John Martin; remainder to John Wynchestre and Nicholas Hastinges, who are to be executors. Proved at St. Austin-the-less, 5 December, 1382.

III.

THE WILL OF ALICE HALYE. 1261 A.D. (*Penes* F. F. Fox, Esq., *Bristol Deeds*, No. li.)

✠ Ego Alicia Halye de parrochia Omnium sanctorum Bristollie. die Mercurii proxima ante festum translationis sancti Swithuni. Anno gracie. M^o. CC^o. lx^o primo. In nomine patris & filii & spiritus sancti amen. In hunc modum meum condo testamentum. In primis animam meam Lego deo quam passione sua redemit. Corpus uero meum ad sepeliendum in cimjterio omnium sanctorum. summo altari eiusdem Locj. ij.s. & domino. Willemo. capellano ij.s. Diacono Loci. xij.d. subdiacono. vj.d. Item in cera & ea que pertinent ad

eandem .v.s. *Item* ad classicum¹ meum pulsandum. viij.d. *Item* In psalterijs .vj.d. *Item* ad depositum meum parandum .scilicet ad potum clericorum & ad sarcophagum & ad alia earum similia .iiij.s. *Item* lego domum meam in parrochia omnium sanctorum in vico ex opposito draperie sitam inter terram que fuit Walterij de monte ex parte boreali & terram que fuit Laurentij Le Mercer .ex parte australi .& extendjt se a vico antierius² usque ad terram que fuit petri de Wygornja posterius .ad perpetuum Juuamen Luminaris in eadem ecclesia ad missam beate virginis Marje ante summum altare .scilicet ad cereos per manus procuratorum eiusdem parrochie qui pro tempore fuerint faciendos & reparandos . in puram & perpetuam elemosinam saluo seruicio capitalibus dominis .pro anima mea .& pro anima Willelmi halye virj mej .& pro animabus omnium antecessorum & successorum nostrorum .ut anime nostre speciales habeantur in memoria in eadem ecclesia. *Item* lego domino Willelmo² vjcario ecclesie omnium sanctorum meliorem plumalem culcjtram.³ *Item* Roberto viro meo lego vnum lectum plumalem⁴ .j. quissinum⁵ .ij. lintheamina⁶ .j. tapetum .ij. ceruicalia.⁷ *Item* Johanne pinel lego .j. lectum plumalem .& .j. quissinum. *Item* Elene quondam seruientj mee .j. lectum plumalem .j. quissinum. *Item* Hemmotj seruientj mee .j. paruum lectum plumalem .ij. ceruicalja. *Item* Willelmo quondam seruientj meo .ij. cerujcalja .xij.d. de arreragijs & molam magnam ad cinapim. *Item* Waltero clerico .xij.d. *Item* Aljeje vxorj Nicholai cuppare paruum cofrum meum. *Item* in pane ad opus pauperum iiij.s. si bona suffcjant. *Item* operi ecclesie omnium sanctorum .xij.d. *Item* ad seruicium beate virginis omnium sanctorum⁸ .j. manutergium.⁹ *Item* Matillide vxori Petrj Gurnard .j. manutergium. *Item* Agneti vxori Willelmi coej .j. manutergium. *Item* lego ad vendenda ad debita mea acquietanda & ad testamentum meum complendum .vjdelicet vnum

¹ The knell.² Presumably Sir William Selke.³ *Culcita* or *culcita* means a mattress or couch. (*Conlocemus in culcita ptu-mea*: Cicero, *Tusculan. Disput.*, III., xix., 46.)⁴ Feather bed.⁵ Cushion.⁶ Linen sheets.⁷ Cushions, pillows, or bolsters.⁸ The daily votive office of Our Lady.⁹ Towel, to dry the hands.

cyphum¹ argenteum .j. vaccam .j. juuencam .j. vitulum
 Que sunt in custodia Ade Delby apud leye. Item .j.
 suem cum .iiij. porcellis .j. peciam de Busset. .ij. cyphos
 de mazer² .iiij.^{or} coclearja argentea .j. fermaculum³
 argenteum . duo pallia de virjdj panno . penulata⁴ . .j.
 supertunica de pannez⁵ .j. tunja de virjdj. duas ollas
 eneas .ij. pelues .iiij. patellas. & quartam patellam
 ancarjam⁶ .iiij.^{or} martinotes⁷ .ij. Enderja⁸ .j. saccam
 .v. cistas .j. culcitram⁹ albam punctatam .j. craticulam¹⁰ .
 .iiij. candelabra ferrea. & omnia alia bona mea quocumque
 locorum in-uenta Lego insimul ad vendenda & inde
 prouenjencia lego ad distribuenda pauperibus Bristollie
 & ad diuina celebranda pro anima mea & pro animabus
 omnium fidelium defunctorum pro dispositione executorum
 meorum . quibus voluntatem meam committo . soluto
 debito . completo testamento . Executores huius testamentj
 mej constituo . dominum Willelmum vjcarium ecclesie
 Omnium sanctorum . Walterum clericum . & Nicholaum
 Cuppare . quibus supplico prout superius est ordinatum
 pro deo & animabus eorundem sicut vjderint melius &
 cautius ad commodum anime mee ac animabus omnium
 fidelium defunctorum nomjne meo disponant & ordinent.

*Endorsed Grene lates in the fifteenth century hand
 in which the vestry book is written : and Hec
 est testamentum Aljeje Halye de parrochia
 omnium sanctorum Bristollie conditum die
 Mercurii proxima ante festum translacionis
 sancti Swithunj . Anno gratie M^o.CC^o. lx^o.
 primo in a contemporary hand.*

¹ A bowl or cup.

² Mazers are large drinking bowls or cups.

³ Possibly a clasp or buckle.

⁴ Lined. It is not clear what "pallium" means here.

⁵ Perhaps "pannes" or cloth.

⁶ Perhaps for "patellam ansariam," put for "patellam ansatam," a dish or plate with handles.

⁷ Is this some sort of Note, i.e.

cup? John Jenkyns *alias* Steyner and Agnes his wife gave a stonyng Nootie with a keuyr well y-gulth to All Saints Church, c. 1492 (*Vestry-book*, p. 153).

⁸ I cannot explain this word.

⁹ *Culcita* or *culcitra* means a mattress or couch. (*Conlocemus in culcita plumea*: Cicero, *Tusculan. Disput.*, III., xix., 46.)

¹⁰ A little gridiron.

IV.

ENDOWMENT OF A LAMP TO BURN BEFORE
ST. MARGARET'S ALTAR, AND OF THE
SERVICE OF ST. MARY.

Endorsed Euydence of the Cornere house nexte the
Condyte for oure lady [Seruyce in a later hand]
iij.s. in the fifteenth century hand already
referred to.

Datum per copiam. Nouerint vniuersi quod Ego
Ricardus de Manegodesfeld Maior Bristollie de ordina-
cione. consensu. & assensu tocius comitatus eiusdem ville
tradidi. dimisi. Concessi. ac presenti scripto confirmaui
Johanni Kyft Burgensi nostro totam illam terram in villa
Bristollie iuxta Cimiterium ecclesie Omnium sanctorum
quam Johannes de yate draperius in confeccione testi-
monii sui ad seruicium beate Marie in dicta ecclesia
Omnium sanctorum reliquit. Que quidem terra iacet
inter dictum Cimiterium ex vna parte. & terram que
fuit Johannis Plumberii ex altera. & extendit se a vico
de Cornstrete antierius usque ad terram que fuit Galfridi
Cormangere posterius. & continet eadem terra in latitudine
nouem pedes & dimidium. et in longitudine viginti &
nouem pedes. Habendam & tendendam totam predictam
terram cum edificijs & omnibus pertinencijs suis eidem
Johanni Kift & heredibus uel assignatis suis libere quiete
bene (?) & in pace Jure hereditare imperpetuum. Red-
dendo inde annuatim fratribus kalendaribus Bristollie
octo solidos argenti ad quatuor anni terminos. videlicet
ad Pascham duos solidos. ad Natiuitatem beati Johannis
Baptiste duos solidos. Ad festum sancti Michaelis. duos
solidos. & ad Natiuitatem domini duos solidos. & heredibus
Jacobi la Warre decem solidos. ad eosdem terminos equis
porcionibus. & ad sustentacionem vnius lampadis ardentis
ante altare sancte Margarete in predicta ecclesia Omnium
sanctorum duodecim denarios ad duos anni terminos scilicet
ad Pascham sex denarios & ad festum sancti Michaelis

sex denarios. Et etiam ad seruicium beate Marie in predicta ecclesia Omnium sanctorum tres solidos annuatim ad quatuor anni terminos principales equis porcionibus pro omnibus seruiciis. exactionibus. querelis. & demandatis ad dictam terram pertinentibus. saluo vno obolo argenti per annum de landgabulo. In huius autem rei testimonium presenti scripto sigillum comitatus Bristollie est appensum. Hiis testibus. Symone Adrian & Johanne Clerico Senescallis tunc Gilde marcandorum (?). Willelmo de Marina & Waltero fraunceys prepositis. Roberto Turtle. Euerardo fraunceys. Ricardo Osmund. Stephano le Jeneye. Radulpho Wineman. Ricardo de Bercham. Ricardo Le Ropere. Gilemino Draperio. & multis aliis. In cuius Copie testimonium presentibus sigillum Maioritatatis ville Bristollie & etiam sigillum Officij Decanatus eiusdem ville sunt appensa.

Of the two seals, only part of the mayor's seal remains.

According to Ricart, Richard of Mangotsfield was mayor in 1285, 1286, 1290, and 1299. Ricart does not give the prepositors for any of these years. Of the Gild of Merchants nothing seems known definitely at this time. A Walter le Fraunces was mayor in 1233 and another in 1293. Everard Frauncis was bailiff in 1324, 1327, and 1328. A Radulphus Wynemone was bailiff in 1314. A Robert Turtle was one of the witnesses in William Selke's grant mentioned on p. 158: and a James le Warre was mayor in 1236.

Symon Adrian and William de Maryna were seneschals in 1275, and Symon Adryan had been so before in 1270. William le Maryner was seneschal in 1299, so that he probably was not prepositor or bailiff that year. Walter le Fraunces was mayor in 1293, so that he is not likely to have taken an inferior office at any later date. The latest date for the lease is thus 1290, and possibly it may be 1286 or 1285.

Joceus de Reigny, senior, granted towards the lights of the church, and in return for certain easements conceded by the vicar, churchwardens, and parishioners, of their cemetery, 2s. 6d. rent assize from a tenement opposite the south door of the church; witnessed by John de Axebrugge, John atte Waller, Richard le White, Walter le White, Joceus de Reigny, junior, and Clement Turtle, on Thursday, St. James Ap., 1331, 5 Edw. III (*endorsed i.j.s.vj.d. of Rente Assize for J. Baste dor of John Branfeld goyng yn-to the Churchelers, in the original fifteenth century hand of the restry-book before mentioned*). Ricart makes John de Axbrige mayor in 1331, John at Wall bailiff in 1330 (another in 1232), Richard le White bailiff in 1313 and 1319, Joceus le Rayny bailiff in 1329 and 1334, and Clement Turtle bailiff in 1321 and 1322.

There is no mention of St. Margaret's altar in the later documents at All Saints Church.

V.

GIFT OF A PIX TO HOLD THE RESERVED EUCHARIST
AT THE HIGH ALTAR, AND FOR HUSELLING
THE SICK : 24TH DECEMBER, 1303.

*Endorsed Evidyence of Rogere Gurdelere for the
Cowpe¹ & the Cuppe² & the Spone in the same
fifteenth century hand as before mentioned.*

Omnibus christi fidelibus hoc presens scriptum visuris
uel audituris Rogerus le Gurdlare parochianus Ecclesie
Omnium Sanctorum Bristollie salutem in domino. Nouerit
vniuersitas vestra me dedisse, Ecclesie Omnium Sanctorum
predicte ad honorem dei patris omnipotentis & gloriose
virginis & Matris Marie & Omnium Sanctorum vnam
Cuppam, cum Coopertorio de argento, deauratam infra
& extra, cum vna Cruce & ymagine argenti similiter
deauratis supra existentibus, cum Longo pede, lapidibus
ornato, similiter deaurato ponderis Sexaginta & Septem
solidorum argenti. & infra eandem Cuppam quoddam
vas argenteum, ad Modum Cyphei fabricatum ponderis
duorum solidorum & sex denariorum argenti. & quod
illa Cuppa cum predicto Cypheo infra existente, in
predicta Ecclesia imperpetuum permaneat ad summum
altare³ eiusdem Ecclesie. Ita quod preciosum Corpus
christi, infra apponetur & semper custodietur, & quod

¹ Cowpe, O.Fr. *Coupe*, Lat. *cupa*. The original meaning is *tub, vat, or barrel*. The *Promptorium Parvulorum* explains it as *Pece, crater*, which means a large bowl, a cistern, etc. It evidently means here a large covered standing or hanging pyx.

² The "Cuppe" *ad modum Cyphei fabricatum* was a small pyx to hold the reserved Eucharist inside the large "Cowpe." CUPPE, *Ciphus, Patera, cuppa*. (*Prompt. Parv.*)

³ A decretal of Gregory IX. required the priest to keep the Eucharist reserved for the sick in a clean and honourable place by itself (Lib. III : Tit. 41 : cap x). The common practice in England and France was to hang it in a pix under a canopy over the high altar (for Linde-

wode's comment on the practice see *Provincialis*, Lib. III : Tit. *De custodia Eucharistie* : cap. *Dignissimum* : verb. *Cum clausura*). This was not, however, the only method adopted in England, although by far the most common. In the Office of the Deacons of Trinity Church, Coventry (*British Mag.* 1834 ; vi, 264, 265) there is twice made mention of "the door at the high altar's end where the sacrament standeth." And the infamous Udall says : "In a great number of places even here within this realm, both abbeys and other churches, the sacrament was never yet unto this day hanged over the high altar" (*Troubles connected with the Prayer Book of 1549*, Camden Society, 1834 ; p. 156).

illa Cuppa cum predicto Cýpho infra existente, ad infirmos eiusdem parochie, semper portetur cum corpore christi, ad eisdem infirmis Ministrandis & serviendis. Et in quacumque visitacione in predicta Ecclesia facta per venerabilem patrem dominum, Wýgornensem Episcopum & Archidiaconum Gloucestriensem, predicta Cuppa semper eis declaretur. Et quia volo quod hec mea donacio & predicta ordinacio in perpetuum obseruentur: ne per quemcumque vicarium in dicta Ecclesia de cetero existentem, nec per procuratores, nec per quoscumque alios eiusdem Ecclesie parochianos, infringentur, aut inpedientur, nec predicta Cuppa, cum Cýpho predicto infra existente, in alium Locum, nec in alios vsus vnquam in posterum quod superius est expressum amoueatur, asportetur nec quocumque alio modo, alienetur. Rogavi dominum Willelmum Schoche tunc vicarium eiusdem Ecclesie quod fulminaret sentenciam excommunicacionis, ac publice pronunciaret, super omnes illos predictam formam in aliquo punctu, contraire, inpedire ac infringere presumentes. Idem-que vicarius ad mei Rogatum, & ad predictas donacionem & ordinacionem firmitus Ratificandas & confirmandum [sic]: predictam sententiam excommunicacionis in forma que sequitur presentibus tunc omnibus parochianis antedictæ Ecclesie pronunciauit. In dei nomine amen. Ego Willelmus Schoche¹ vicarius antedictus, auctoritate dei patris omnipotentis & filij & spiritus sancti & sanctorum Canonum. Excommunico pulsatis campanis, candelis accensis & anathematizo [sic], ac a Liminibus sancte dei Ecclesie & a Consorcio sanctorum omnium sequestro, omnes illos siue

¹ Henry Snellard granted to Sir William Scoche that tenement which he had of the gift of William Mannig, formerly rector of St. Lawrence, Bristol, and the will of Hugo de Melles, in Wynchestret between the tenement that was Robert Marescall's and that that was John de Leye's, in the parish of St. Peter's: 12d. to come annually *Capitali Domino* and his heirs and assigns. Witnessed by Richard de Manegodesfeld, mayor; Walter Fraunceys and Thomas de la Graue, *bailifs*; Thomas de Wych, Adam le Northerne, John Marescall, Robert Waterledare, Robert Goldbetare, John

de Leye, and others. (At All Saints. *Endorsed yn Wynchestrete. xij. d. in the fifteenth century hand mentioned before.*) The endorsement was by Sir John Thomas, and in entering the deed on p. 74 of the book of records, accounts, etc., he mistook the S of the deed for an M in both cases, so that the names appear as *Muellard* and *Mooche*. R. de Mangotsfield's last mayoralty was in 1299. Walter Fraunceys was mayor in 1293, and Thomas de la Grave in 1303; so that this deed is probably of 1290, or perhaps 1286 or 1285.

clericos siue Laicos, predictam donacionem, ac ordinationem prefatam, infringentes, inpedientes, & dictam Cuppam cum predicto Cýpho de dicto Loco suo certo sibi assignato, quocumque modo alienantes, & ad alienacionem consencientes & inde aliquam partem extra formam predictam habentes, seu partem inde se habituros expectantes. In cuius rei testimonium tam Ego predictus vicarius, sigillum meum, quam supdictus [sic] Rogerus sigillum suum, huic presenti scripto apposuimus. Et vt tenor & forma presentis scripti, melius & firmitus Ratificentur & confirmentur: procurauimus discretum virum dominum Decanum¹ Bristollie, ad huic presenti scripto, sigillum officij sui ponendum. qui ad Rogatum nostrum sic apposuit. Nos Decanus christianitatis Bristollie ad instanciam & Rogatum predictorum Willelmi & Rogeri sigillum officij nostri huic presenti scripto duximus apponendum. Datum Bristollie In vigilia Natalis domini Anno eiusdem Millesimo Tricentesimo Tercio & Anno Regni Regis Edwardi filij Regis Henrici: Tricesimo Secundo. Hjs testibus Thoma de La Graue² tunc Maiore Bristollie. Thoma de Tyloý. Henrico de Calne. Hugone Sanekýn. Ricardo de La Ropeselde. Rogero de Apperlegh. Ricardo Bryán Johanne Kýst [? Kýft] Ricardo de Westone. Roberto Martýn Willelmo Gýlemýn clericis & multis alijs.

The comma represents here a small bracket with the concave side to the right about the same size as the small letters: and the inverted semicolon represents a similar-looking stop in the MS.

Three seals of green wax are attached. The first is elliptical, somewhat broken above, 22 mm. across by about 35 mm. long (originally), bearing a ship with a mast but no sails, on waves; and S' DECANATVS BRISTOLL can be made out around the margin. The second is hexagonal, about 16 mm. across, with the figure of an ass (?) and . . . GETE GE (??) in the margin. The third is circular, about 20 mm. across: within two interlacing squares is the head of a man (? a bishop) full face; with * S' WILLI: SCHOCHE.

¹ Concerning rural deans or deans of Christianity, Lindewoderemarks, "Cuius officium est in causis ecclesiasticis citationes et transmissas exsequi: ut plenius legitur et notatur in dictis constitutionibus tanto, et constitutione ita mortalium, et cuius sigillum in talibus est authen-

ticum, ut in constitutione Othonis, quoniam tabellionum usus (Prov. Lib. II: Tit. De iudicijs: Cap. Quidam ruralium: verb. Decani rurales).

² The Maire of Bristowe is Kalendar, Camden Society, 1872; p. 32.

There was another Roger Gurdeler who gave, with John Forge, cook, the sum of £6 to the new gable window as appears by the churchwardens' accounts for (?) 1407. He has been confounded with the donor of the Cowpe. **Thomas de Tilloy** was mayor in 1292 and 1331 according to Ricart. At All Saints there is an indenture between **Henry de Caine** and **Roger de Apperlegh** letting a cellar *in vico Cocorum* opposite the Drapery between the tenements of the Prior of St. James and Henry Pye, for £8, witnessed by Roger Terry, Richard Adryan, **Richard de Weston**, **William Gylemyn**, *clerk*, etc., dated St. Dunstan's Day, 34 Edw. I. (i.e. 1306), with a round seal of green wax bearing a Greek cross between the antlers of a stag's head caboshed, and . ✱ S' ROGERI D'APPERLEYE around the margin. Three other deeds relating to the same messuage, dated 3 Edw. II. (1310) are in the same church: each is witnessed by **William Randulf**, *mayor*; **John de Methelan** and **John de Wachet**, *bailiffs*; and the following who appear in one or more:—**Richard Bryan** (3), **Walter Mailleden** (3), **Richard de Weston** (3), **Henry Pye** (3), **Walter Oppehull** (3), **Roger de Stanes**, *clerk* (2), **Thomas de Tyloy** (2), **Alexander Koop**, **Richard de la Moore**, **Thomas Shirlok**; **William Gylemyn**, *clerk*. **Robert Martin** was excepted out of a general pardon of insurgents at Bristol in 1312 (S. Seyer, *Memoirs*, etc., Bristol, 1823; ij, 108). A burgess named **William Gylemyn** is mentioned in the Rolls of Parliament 1315-16 (Seyer, ij, 90). In 3 Edw. III. he granted quitclaim to Robert le Wythe, Christiua his wife, and William their son of a messuage in Gropecunte lane. He witnessed a quitclaim by John le Wyghthe Jrmangere to Omfridus Wen de Cirencestre, butcher, of a tenement in Worthshipestret; together with John del Celer, *mayor*, **Thomas le Specer** and **Robert Randalf**, *bailiffs*, and several others, Thursday, St. Silvester's Day, 1310, 4 Edw. II. Also a quitclaim by John de Bardeneye, son and heir of Robert de Bardeneye, of a garden in le Puthey to **Thomas de la Graue**; together with Roger Turtle, *mayor*; John de Romeneye and Walter Prentiz, *bailiffs*, Saturday after St. Luke's Day, 18 Edw. II. (1324). He also witnessed a grant by **Thomas de la Graue** of the same to John de Axebrugge, son of Elye de Axebrugge, dated Friday before SS. Simon and Jude's Day in the same year. These are all at All Saints. **Roger de Apperlegh** witnessed some deeds at Bristol Museum Library (Nos. 84, 121, 134) in 9 Edw. III.: and with **Richard de Weston**, another (No. 38) in 33 Edw. I. **William Gylemyn**, *clerk*, and **Thomas de la Graue** and others, witnessed a quitclaim by John Payn de Lodewell to Hugo Payn and his wife Isabell of a tenement in Cornstreet between those of Adam Wellysschott and William de Hanefeld; together with Roger Turtle, *mayor*; **Thomas le Spicer** and John de Romeseye, *bailiffs*, 11 July, 11 Edw. II., at Lodewell. (At All Saints.)

VI.

AN INVENTORY OF CHURCH GOODS, 1395.

Both copies of the following indenture are preserved at All Saints Church: it is especially interesting as being the original of the inventory in English of the same date, on pp. 315 *sq.* of the volume of records and accounts which was compiled by Sir Maurice Hardwick (vicar from 1455 to 1472) with the assistance of Sir John

Thomas, and written by the latter, as the volume itself¹ records on p. 83. The writer of that volume also endorsed most of the deeds preserved at the church that existed in his time. The following text is that of sheet A, and the variations of B (other than in spelling) are recorded in the notes. The English version has been printed by Nichols and Taylor in *Bristol, Past and Present*, Bristol, 1881; ij, 105.

Hec indentura testatur quod Willelmus Lench & Stephanus knyght procuratores Ecclesie Omnium Sanctorum Bristollie tempore quo recesserunt ab officio suo predicto videlicet quinto die Mensis Marcij Anno domini Millesimo CCC^{mo} Nonagesimo quinto liberauerunt & sursum reddiderunt Reginaldo Tauerner & Johanni lentwardyn procuratoribus succedentibus bona & res ecclesie prenotate videlicet

“—In primis .J. rubeum Missale² price xls. et .J. vetus missale price xiijs. iiijd. Item .J. gradale bosed³ price .iiij. marcas. Item aliud gradale price xls. Item magnum gradale album price .iiij. marcas. Item gradale⁴ sancte Marie. price .vjs. viijd. Item .J. paruum gradale abbreviatum. price .xs. Item .J. vetus gradale price .xiijd. Item .J. manuale⁵ price .xs. Item .J. martilogium price .xs.

“—Item optimum portoforium price xls. Item .J. dj portoforium cum psalterio price xxs. Item .J. vetus portoforium price .xiijs. iiijd. Item .J. vetus dj portoforium sine psalterio⁶ price .xs. Item .J. vetus antiphonare. price .vjs. viijd. Item .J. paruum vetus antiphonare price .xld. Item .J. ordinale⁷ price .xxs. Item .J. psalterium album. price .xs. Item .J. psalterium nigrum ex dono Thome Norton⁸ quod prior kalendariorum habet in custodia. price .xiijs. iiijd. Item .J.

¹ This has been attributed to Ricart, but the statement of the book itself is as above.

² This was “vnum Missale de vsu Sarum,” bequeathed by William Selke in 1270 (*Vestry Records and Accounts*, p. 78; *Bristol and Glouc. Arch. Soc.*, 1890-1; xv, pl. xxxv).

³ William Selke bequeathed a grail with processional, ordinal, troper, etc., bound in one volume, and another unbound: perhaps among these.

⁴ “J lytyll Grayle to serue our lady Masse” in the English version.

⁵ William Selke bequeathed “vnum Manuale cum ymnario” in 1270.

⁶ Walter Isgar, vicar of All Saints, bequeathed “half j portues of the Temporall & Sanctorum” in 1321 (*Vestry Book*, p. 78).

⁷ Walter Isgar “gave j Ordynall to the seyde Church.”

⁸ Perhaps the Thomas Norton who was bailiff in 1393, sheriff in 1402, and mayor in 1414. But there were several persons of this name living about this time.

*paruum psalterium integrum price .ijs.*¹ Item .J. *vetus psalterium price .xijd.* Item J. *magnam legendam de temporali price .xls.* Item *aliam legendam sanctorum. price xijjs. iiijd.* [Item .vj. *nouos quarternios de temporali price xvs.*² *struck out, and against it is added in another hand* Item J. *nouam legendam de temporali price (blank)*]

"Item *optimam sectam vestimentorum de ciclantouns*³ *de viridi & blueto*⁴ *cum orphuris de felvet stragulato*⁵ *price .x. marcas.* Item *aliam sectam vestimentorum de ciclantouns de blueto & plunket*⁶ *price .vj. marcas.* Item J. *capam de blueto stragulato price .xijjs. iiijd.* Item J. *casula cum .ij. tunicis panni deaurati cum .ij. albis & .ij. amictis & .ij. fanonn. price .xlvs. viijd.*⁷ Item *aliam capam de ciclantouns cum aibus price .xxs.* Item J. *vestimentum nigrum. price .ij. marcas.*⁸ Item J. *vestimentum rubeum de grifonibus panni deaurati price .ij. marcas.*⁹ Item .J. *rubeum vestimentum price .xijjs. iiijd.*¹⁰ Item .J. *album vestimentum price .vjs. viijd.* Item .J. *casulam panni deaurati cum aibus in circulis price .vjs. viijd.* Item .J. *casulam panni cerici de nigro & albo diapre price .vs.* Item .J. *casulam rubeam de satyn cum gallis auratis. price .vjs. viijd.*¹¹ Item .J. *casulam crocei coloris cum blodeo stragulato price .vs.* Item .J. *veterem capam cum .ij. tunicis panni deaurati veteribus price .xijjs. iiijd.*¹² Item .ij. *capas & ij albas pro pueris price iijs. iiijd.*

Item .J. *corporale nouum cum coopertorio viridi. cum floribus auri de cypres.*¹³

Item J. *pannum tinctum de trinitate ad cooperiendum magnum altare et .ij.*¹⁴ *cortinos de angelis tinctos cum*

¹ Struck out in B, and "venditur pro ijs." in the margin.

² Underlined in B, and "vna noua legenda rubea" added over it, in another hand. "xvs." is also struck out, and "vjs. viijd." added in a different hand.

³ Ciclatoun was a rich figured cloth.
⁴ The English version only says green.

⁵ "Of Ray felwett."

⁶ The English only mentions blue: plunket is a coarse woollen cloth, according to J. O. Halliwell.

⁷ The price is struck out in B, and "xxs." added in another hand.

⁸ The price is struck out in B, and "xijjs. iiijd." added in another hand.

⁹ The price has been struck out in B, and "xxs." written over in another hand.

¹⁰ The price struck out in B, and "vjs. viijd." added in another hand.

¹¹ Price struck out in B, and "xjd." added in another hand.

¹² Price struck out in B, and "vjs. viijd." added in another hand.

¹³ "J grene Corporas Case with flowres."

¹⁴ Against the line ending here B has "xjd." in another hand. It probably is the price of the new corporas and case.

ferramentis. & vnum pannum de coronacione beate virginis similiter tinctum. price. xxxs.

Item .vj. plumalia¹ panni cerici price .vjs. viijd.

Item .ij. tables & .ij. paxbredis price. xiijs. iiijd.²

Item .J. velum quadragesimale paled³ de albo & blueto price. xijd.

Item .J. rubeum amictum cum⁴ lapidibus⁵ price. xld.

Item .J. owche⁶ pro capa de cupro supraurato cum lapidibus price. xld.

Item .J. ventale de nigro felwet cum rubea frenge⁷. price. xld.

Item .ij. pauteners⁸ de nedelwork vnum de ymaginibus & aliud de ceruo in circulo. price. xld.⁹ [Item¹⁰ added in a later hand]

Item J pannum pro principali crucifixo tinctum de passione. price. xld.

Item .iiij. pannos albos cum crucibus ¹¹rubeis de bukeram price. vjs. viijd.¹¹

Item .iiij. Chalouns ad ponendum ante altare. price. xld.¹²

Item .ij.¹³ tuellia cum frontellis & .vij.¹⁴ tuellia sine frontellis & .J. paruum manitergium. ¹⁵Item .ij. frontella de rubeo cerico¹⁵ cum frenges de cerico price. vjs. viijd.¹⁶ Item¹⁷ .iiij. Superpellicia [cum struck out]

[Item .iiij. tuellia de Dono Emme Chylcombe in another hand and blacker ink]¹⁷

¹ Pillows of silk.

² Price struck out in B, and "vjs. viijd." added in another hand.

³ "J lente clothe of wyte."

⁴ In B is added above the line in another hand and black ink, "v."

⁵ In B is added here in same ink and hand as preceding, "principalibus," and after the price, which is struck out, "& xiiij alijs positus in argento." The English has "J Rede Amys y-powdryd with pery."

⁶ Called "pectorall" in the English version: i.e., a brooch.

⁷ "J veyle of blak felwet for the Cowpe."

⁸ Only the two first are mentioned in the English version. A patener is a cloth to hold the paten in, similar to the modern "humeral veil."

⁹ Price struck out in B, and "xxd." added in another hand.

¹⁰ Not in B.

¹¹⁻¹³ Struck out in B, and "viridia cruces" written over in black ink and another hand; and "xld." added in a different hand, and brown ink.

¹² Price struck out in B, and "xvd." added in another hand. Chalons are coverlets for beds, etc.

¹³ Struck out in B, and "v" written over in black ink.

¹⁴ Altered in black ink in B to "vj," over an erasure.

¹⁵⁻¹⁶ Struck out in B.

¹⁶ B adds in black ink and another hand: Item J tuellium cum vno panno tincto pro summo Altare (the rest is hardly legible).

¹⁷ Not in B. Emmot Chilcombe died 29 December, 1423 (*Little Red Book of Bristol*, ed. F. B. Bickley, Bristol and London, 1900; vol. i, p. 2).

"Jtem .ij. mantella de rubeo satyn cum .iiij. botenis superauratis pro ymagine sancte Marie & puero in capella.

Jtem .ij. mantella de rubea satyn cum .iiij. botenis superauratis pro ymagine sancte Marie & puero in columpna. & .J. mantellum de felwet chekere pro eodem puero cum J. Scalonn argenti.

Jtem J. mantellum de rubea satyn cum .iiij botenis argenti ad ymaginem sancte Anne in columpna.

¹Jtem .ij. tuellia cum frontellis & .ij. tuellia sine frontellis¹ cum ¹ij. candelabris de pewtre¹. & J. vesti-[m]entum de rubeo satyn Stragulato cum .vj. velaminibus cericis² & ij. cremyles.³

*In a different hand.*⁴

Jtem corde & rope price xjs. xd. ob.

Jtem J. magnum boket price xxd.

Jtem .v. parue bokettes price ijs. vijd.

Jtem .J. duplex peleye xd.

Verso: in the original hand.

"Jtem .J. cupam⁵ argenti & superauratam ponderis xxxiiij vnce & vijd. ob.

Jtem J ciphus⁶ argenti superauratus ponderis J. vnces . & dj. & iiijd.

Jtem J. crismatorium⁷ argenti ponderis .viij. vnces⁸

Jtem J. tabernaculum in magno altari argenti & superauratum de coronacione beate virginis cum saphiro imperiali⁹. price .xxli.

Jtem magnum calicem ponderis xxj. vnces & dj.

Jtem alium calicem calicem (sic) ponderis xiiij. vnces . iiij quarters . ijd. ob.

Jtem J. pixidem eburneam ligatam cum argento.

Jtem alium calicem ponderis . xiiij vnces . & dj. ijd. ob.

¹⁻¹ Not in B.

² "J Red Ray vestymet of Saten and vj kerchewys of Selke."

³ ? Chrisoms.

⁴ None of these in B.

⁵ "J Cowpe."

⁶ "J lytyll Cuppe." Whether these two are the same as those presented by Roger le Gurdeler in 1303 (see p. 167) is not quite certain. The vestry-book already frequently cited puts the total

weight of those as 45 ounces (p. 133). and the inventory of 1464 has "J Cowpe for the Sacrament with J pece & J. Spone all y-guldyd weyeng xlv vnces." The extra weight perhaps may be accounted for by the spoon, given later.

⁷ "Oyle fat" in the English version.

⁸ B adds in another hand: J vna pede eiusdem & J clapse.

⁹ The English version has: with J Ruby Jmperyll.

Item alium calicem ponderis . xv. vnces & dj. [Item calicem Carpentare in another hand and black ink]¹

Item alium calicem ponderis . xiiij. vnces & . vd.²

“Item .iiij. campanas manuales³ ponderis vxvij. librarum.

Item .ij. thuribulos de latun . price . vjs. viijd. cum .ij. pippibus

Item .iiij.⁴ paria candelabrorum⁵ de peutre ponderis . xl. librarum . price .xijs.

[Item .J. peluem cum lauacro sine lid & pipe price .iiij. struck out⁶]

Item .J. textum de aquila⁷ superauratum price vjs. viijd.

Item aliud textum⁸ ligneum price .iij. s. Item ad magnum altare .J. textum paruū⁹ . ij. cruettes de peutre .J. nouam campanam de latun¹⁰ price .xiijd. & aliam campanam eneam price . iiijd.

“Item .J. rotam ligneam pro candelis¹¹ . & J. vetus candelabrum ferreum¹² ponderis .xij. librarum. Item .ij. longa candelabra lignea.

Item .iiij. magnas rotas pro campanis. Item J. scalam de .viiij. ronges.

Item aliam scalam de .xxvj. ronges.

Item .ij. libitinas¹³ cum coopertorijs.

Item J. pixidem ligneam¹⁴ ligatam cum ferro price .xvj. d.

In another hand.¹⁵

Item .ij. vexilla price . xviijs. vjd.

Item .ij. banerstaves pictos [blank]

¹ Not in B. It seems to be the “chalys of fraterne of the Carpenters” of the English version.

² B adds in another hand: Item alium calicem rend (?).

³ “Lyche bellis” in the English version.

⁴ In B struck out and “ij” written over in black ink.

⁵ B adds in black ink and another hand: vj. discis.

⁶ So also in B.

⁷ This seems to be the “Egyll of Tree y-guld” of the English version: perhaps the same as “vnam aquilam ligneam non depictam” bequeathed by William Selke in 1270.

⁸ “Dexte” in the English version: i.e. desk, and not textus, or book of the Gospels.

⁹ Possibly the same as “vnum lectricum ad Autenticum altare” bequeathed in 1270 by William Selke.

¹⁰ “J latenn bello for the hie Awtyre.”

¹¹ A trendle. See *Some Principles and Services of the Prayer Book Historically considered*, edited by J. Wickham Legg, London, 1899; pp. 35 sq.

¹² William Selke bequeathed “vnum candelabrum ferreum ad opus mortuorum” in 1270.

¹³ Biers, with their covers.

¹⁴ William Selke bequeathed “vnam Cuppam ligneam depictam ad Eucharistiam” to All Saints Church in 1270 (*Br. and Gl. Arch. Soc. Trans.* xv, pl. xxxv).

¹⁵ Another hand in B, but not the same as this in A.

Item ij. cruettes price vjd.¹

Item optimam crucem ponderantem² [blank]

Item .J. nouam crucem de ligno depicto price . xxiiij.s.

Item .ij. crosstaves depictos [blank]

*In another hand.*³

Item ij Cruetys de argento . v .vnces & dj.⁴

VII.

ROYAL LICENCE FOR THE ENDOWMENT OF A LAMP BEFORE THE HIGH ALTAR.

Endorsed E | 8 | . 16 January, 20 Ric. II. 1396-7).

[R]icardus dei gracia [R]ex Anglie & ffrancie & Dominus Hibernie. Omnibus ad quos presentes littere peruenierint : salutem. Licet de communi consilio regni nostri Anglie statutum sit quod non liceat viris religiosis seu alijs ingredi feodum alicuius. Jta quod ad manum mortuam deueniat sine licencia nostra & Capitalis domini de quo res illa immediate tenetur : de gracia tamen nostra speciali & pro sex marcis quas Thomas de Wýndesore vicarius ecclesie Omnium Sanctorum in Bristollia nobis soluit in hanaperio nostro : concessimus & licenciam dedimus pro nobis & heredibus nostris quantum in nobis est Philippo Excestre de Bristollia quod ipse sexdecim solidatas redditus cum pertinentijs in Bristollia qui de nobis tenetur in burgagio⁵ sicut tota villa Bristollie :

¹ B adds "vjd."

² B adds in black ink and different hand again: cum vno agno [arg struck out] ij pinnaculis & J parua ymagine pertinentibus cruci.

³ Not another hand in B.

⁴ B has a further list in a different hand from either the original or the additions at the end but similar to the additions in black ink: Jtem J paxebrede de cupro deaurato price: Jtem ij parua tuellia de cerico stragulato cum auro [de cipres in another hand]: Jtem J pannum de auro tincto pro sepulcro: Jtem J pan[n]um tinctum de quatuor militibus: Jtem J pan[n]um principale pro summo altare tinctum pro quadragesima de deposicione et: Jtem vnum

velum quadragesimale cum vno pitee: Jtem iiij candelabra lapidea cum iiij broches de ferro: Jtem iiij cruces paruas reliquias: Jtem vnum castellum cum iiij angelis pro cruce: Jtem vnum holibredclothe: Jtem surplis pro clerico: Jtem J vnum par sotularium de sancto Dunstano: Jtem iiij cordas de lx fethomm: Jtem vnum polei: Jtem J hamum de ferro: Jtem xvij lb. de plumbo. iiij payles de ligno pro morturiis.

⁵ Burgage-tenure was when the tenement was held by a certain annual rent in money, or by some service relating to trade, and not by military or other service that had no such relation.

dare possit & assignare prefato vicario habendo & tenendo eidem vicario & successoribus suis vicarijs eiusdem ecclesie ad inueniendam quendam lampadem coram summo altari in ecclesia *predicta* in honore domini nostri ihesu *christi* continue ardentem & ad facienda alia pietatis opera iuxta ordinacionem ipsius *Philippi* in hac parte faciendo imperpetuum. Et eidem vicario quod ipse redditum *predictum* cum *pertinencijs* a prefato *Philippo* in forma *predicta* recipere possit & tenere sibi & successoribus suis *predictis* imperpetuum sicut *predictum* est : tenore presencium similiter *licenciam* dedimus *specialem* Statuto *predicto* aut eo quod *predictus* redditus de nobis tenetur in burgagio sicut *predictum* est non obstantibus . Nolentes quod *predictus* *Philippus* vel heredes sui aut prefatus vicarius seu successores sui racione statuti *predicti* vel aliorum *premissorum* per nos vel heredes nostros *Justiciarios* *Escaetores* *vicecomites* aut alios balliuos seu *Ministros* nostros vel heredum nostrorum quoscumque . inde occionentur . molestentur . in aliquo seu grauentur . Saluis semper nobis & heredibus nostris *seruicijs* inde debitis & consuetis In cuius rei testimonium has *litteras* nostras fieri fecimus patentes. Teste me ipso apud *Westmonasterium* sextodecimo die *Januarii* Anno regni nostri vicesimo

Scarle

The red and green silk cords remain, but the seal has been cut away.

VIII.

AN INQUIRY INTO A DISTURBANCE AT ALL SAINTS CHURCH, 10 SEPTEMBER, 1457.

Vniuersis *sancte* matris ecclesie filijs. Ad quos presentes *littere* peruenerint. Thomas Wheton Clericus Reuerendi in christo patris & domini. Domini Johannis permissione divina Wigorniensis Episcopi in villa & decanatu Bristollie Commissarius suffice[n]ter & legitime deputatus. Salutem in omnium saluatore. Cum nuper

N

vt accepimus per quorundam videlicet relacionem. Domini Mauricij hardwyk perpetui vicarij ecclesie parochialis Omnium sanctorum Bristollie Wigorniensis diocesi. dictique Decanatus Johannis Shop & Willelmi Box yconomorum eiusdem ecclesie ac aliorum comparochianorum ibidem. qualiter ipsa eadem ecclesia parochialis Omnium sanctorum esset & fuisset polluta. indeque resonabat publica vox & fama. qui vero vicarius yconomi & comparochiani huiusmo[d]i. nos cum omni instancia rogauerunt pariter & requisierunt. quatinus auctoritate officij nostri predicti qua fungimur in hac parte diligentem inde faceremus inquisitionem. Ad quorum rogatus inclinantes quia rationi consonum. Et ne quod absit dicta ecclesia diuinis staret destituta seruicijs. seu infuturum occasione premissorum. Dictus vicarius aut comparochiani predicti. preiudicium senciat at senciant reiactura. citari fecimus per Apparitorem nostrum. Curatos & laicos subscriptos. videlicet magistrum Willelmum Suttonn Dominos Thomam Jacob & Rogerum Ryglyn ecclesiarum parochialium sancte Warburge sancti Audoeni & beate marie de fforo Rectores ac dominos Robertum Mayster Capellanum parochialem sancti Petri & Johannem Gower Capellanum ffraternitatis sancti Johannis Baptiste. necnon Henricum Brownn Nicholam Rede Willelmum Colyns Ricardum Batynn Willelmum Sampsonn & Walterum ffaryngdonn. Qui quidem Inquisitores predicti. coram nobis personaliter comparentes. Assumptis nobis magistro Daudid Coklond in vtraque iure Bacallario. & Roberto Core notario publico in Scribam nostram. Deinde Diligenter interrogati examinati & requisiti. per nos Commissarium predictum. virtute iuramenti primitus prestiti. Deposuerunt fideliter & vnanimiter dixerunt. totalem seriem facti huiusmodi. vt a fide-dignis personis audiuerunt & didicerunt. que persone tunc temporis intererant in vesperis in predicta ecclesia parochialis Omnium Sanctorum. quomodo quidam extraneus sacerdos. quodam-modo suspectus. super certis rebus furtiue ablatijs per eundem in Comitatu Somerset intrauit hospicium cuiusdam communis Coci iuxta ecclesiam parochialem Omnium Sanctorum pro victualibus habendis. Demum ille memoratus sacerdos. videns emulos suos & ministros Domini Regis. exspectantes egressum ipsius. timens se

capi ab illis. mox per aliud Hostium transiuit in dictam ecclesiam parochialem Omnium Sanctorum. & clam vestibulum ecclesie eiusdem intrauit vt ibi securius a suis inimicis seruaret. Demum hoc audiens quidam Balliuus vltra Abonam ville Bristollie antedictæ. mox precipitanter ecclesiam illam intrauit. & die Dominico quando erant in vesperis ibidem. incipiendum hunc psalmum. In exitu Jsrael &c. chorum cum suis sequacibus nepharie intrauit. vt predictum sacerdotem ibidem reseruatum. per scapulas violenter extraherent. Hoc videns vicarius ecclesie parochialis predictæ impetum memorati balliui volens impedire. nec valens violencijs ipsorum intrancium solus resistere. tunc quidam dominus Johannes prynce Capellanus eiusdem ecclesie considerans immanitatem facti. et reuerencia ac timore Dei. nequiter per illos post positis. eciam volens eos extra chorum eicere. vni famulo predicti balliui sibi resistenti. vnam aut duas alapas cum pugno suo. viriliter dedit. Depost alius laicus litteratus existens in choro. vna cum alijs capellanis psalmonizando. tenens paruum librum in manibus suis. volens & affectans. tantummodo litigantes & abinuicem rixantes separare. casualiter ab illo quem in manibus tenuit modicum cutem virlus (?) sic rixancium diruperiebat. cum spintro signaculi illius libri. non animo proteruo aut iracundo. nec sanguis seu habundancia sanguinis inde sequebatur. per quam fieret pollucio ecclesie. Et hanc verborum seriem omnes predicti inquisitores. tam clerici quam laici veraciter dixerunt & deposuerunt nichil addendo vel diminuendo. vnde habita & accepta Diligenti deliberacione super hac causa per nos antedictum Commissarium. dictis & depositionibus predictorum inquisitorum diligenter visis auditis spectis & examinatis pronunciauimus & sententiauius & sentenciando per presentes Denunciauimus. predictam ecclesiam parochialem Omnium Sanctorum minime esse pollutam. Sed licenter potuerunt in ipsa Diuina celebrare. In cuius rei testimonium & in perpetuam rei memoriam. Sigillum officij nostri predicti. vna cum sigillis predictorum inquisitorum. presentibus litteris nostris predictis apponi fecimus. Datum in ecclesia parochiali sancti Johannis Baptiste ville & diocesis antedictæ. Decimo die mensis Septembris. Anno domini millesimo quadringentesimo quinquagesimo septimo.

There are five tags for seals ; but only one of them remains, that of the deanery of Bristol, in red wax, and the edges of this are much broken away. Sir Thomas Wheton is mentioned in the inquiry preliminary to granting the episcopal licence for Halwey's chauntry at All Saints in 1452 as rector of the parish church of St. John Baptist, Bristol, and dean of the deanery. Master William Sutton died before September, 1474 (see Wadley's *Notes*, p. 155). Sir John Gower, "the Tayllours priest," died in 1458 or 1459, and was buried at St. Ewen's parish church "without the enterclose door as one goeth into St. John's chapel," the chapel of the Fraternity of the Tailors (churchwardens' accounts of St. Ewen's, fifteenth century, *penes* Rector of Christ Church with St. Ewen, fol. 32 *verso*). Henry Brown was one of the jury in the action by Sir Thomas Syward, parson of St. Ewen's, and the parishioners, against one John Sharp (*ibid.*, fol. 45 *verso*). Richard Batyn, goldsmith, was a benefactor to St. Ewen's, and the accounts for 20-21 Edw. IV. mention the payment of 6s. 8d. for his grave (fol. 88). William Sampson was another parishioner of St. Ewen's, and his bequest is recorded in the accounts for 18-19 Edw. IV. (fol. 85).

IX.

At the end of the Churchwardens' accounts in the seventeenth century there is generally an inventory of the goods remaining in the church. The following is from Peter Miller's accounts for 1618-19 :—

An Jnvintary of such things as remaineth in the church the (*sic*).

A Commuonion Cupp with his Cover¹ of silver and gilt Wayeing 32 oz. $\frac{3}{4}$. Item 12 silke Cushens.² Item 2 Communion table Clothes.³ Item 3 Carpettes.⁴ Item 4 Bibles.⁵ The parraphrase of Erasmus.⁶ 4 Communion prayer bookes.⁷ 2 surpleses.⁸ 6 greene Cushens.⁹ 6 Cushens wrought with blacke & greene.¹⁰ A great spout of Brase

¹ This still appeared in the inventory of 12 June, 1662. In 1654, '56, '59, '62, is added "two Siluer flagons containing 92 on. $\frac{1}{4}$ with a trunk where in the said plate is putt, both being in y^e churchwardens handes."

² Still existing in 1662.

³ Not in 1654, '56, '59. In '62 is "Item a holland table Cloth & Napken."

⁴ Two carpetts in 1654, '56, '59, and '62.

⁵ Only two in 1654, 1656; "Two great bibles" in 1659; and "3 grete Bibles" in 1662.

⁶ Still existing in 1662.

⁷ None mentioned in 1654, '56, '59; "2 service books" in 1662.

⁸ None mentioned in 1654, '56, '59, '62.

⁹ Still existing in 1662. In '54 is added "one Purple Sattin cushion wrought with needleworke, one Purple Sattin Cloath & purple freinge both for the comunion table," still found in 1662.

¹⁰ Not mentioned in 1654, '56, '59, '62.

and A Chein.¹ A Blacke velvett hearse Cloth.² A Booke of Homilies & Cannons & Articles.³ 7 yeallow platt Candlestickes.⁴ Whitt Candlestickes.⁵ 4 Black Iron Candlestickes.⁶ i Eagle of Brasse.⁷ 2 Cushens in the ministers pue.⁸ j Branch with 18 sockettes.⁹ j. present pottle pott & j quart pott.¹⁰ 20 Buckettes.¹¹ j hower glasse.¹² j peece of Embrodred velvett for y^e pulpett.¹³ 4 mattes.¹⁴ j lanthorne for the Walke.¹⁵ j Blewe velvett Cushen for the pulpett.¹⁶ 3 Coslette~~s~~ furnished.¹⁷ j Targett.¹⁸ i 5 formes.¹⁹ A Frame Aboute the Comunion table with pillowes of Canvas & greene Coveringes.²⁰

¹ In 1659 only "one brass spoute," and in 1662 "a bras spoute for Water."

² Still existing in 1662.

³ Not mentioned in 1654, '56, '59, '62.

⁴ "Six yellow pewter Candlesticks & 16 pewter Socketts with Iron for y^e pewter" in 1654; "six pewter candlesticks & 16 pewter Socketts with Iron for the pewter" in 1656, '59; "15 pewter socketts with Iron stems" in '62.

⁵ In 1620 "5 whitt Candlestickes — with Iron." Not in 1654, '59, '62, unless they be included in the next. In 1654 is added "one new branch of brass with nine Socketts," which existed in 1662.

⁶ In 1662 there were 7. In 1654, '56, '59, '62, "fue Iron Candlesticks"; '62 adds "2 bras: 3 Latten: & 3 smaller hangeinge Candlesticks."

⁷ "One brasse Eagle broken in peece~~s~~" in 1654 and '56. Not in '59 or '62.

⁸ "3 cushions in y^e Ministers pue" in 1654 and '56; "y^e ministers seat," in '59 and '62.

⁹ In 1662 "one timber one [*i.e.* branch] with 18 socketts."

¹⁰ Not in 1654, '56, '59, '62.

¹¹ 6 in 1620; 9 in '22; "twelve leather Bucketts" in '54; "twenty" in '56 and '59; "17 lether Bucketts" in '62.

¹² Not mentioned in 1654, '56, '59, '62. Apparently included in these years under "one Pulpitt cloath & cushion of Jmbrodreded veluett."

¹³ Not mentioned in 1654, '56, '59, '62.

¹⁴ Not mentioned in 1654, '56, '59, '62.

¹⁵ Not mentioned in 1654, '56, '59, '62.

¹⁶ See Note 12, above. In 1654, '56, '59, there is also "one fayre greene veluett cushion with deepe gold and Silk freinge about it, a greene bag to keepe it in, with a greene cushion to put vnderneath it for y^e pulpitt": in '62 it is worded "a greene bag to hould him, & a greene quilt to put vnder him."

¹⁷ Not mentioned in 1654, '56, '59, '62.

¹⁸ Not mentioned in 1654, '56, '59, '62. Instead of these in '54 is "one Pickax, one Iron Bar a Shouell & a Spade," which were still there in '62, with the addition of "one Ladder."

¹⁹ In 1654, '56, '59, "one Dozen of formes, with pillowes of canuas & greene Cloath." In 1662 "15 Joyne ffurms, Canvas Pillows & greene Cloth."

²⁰ Seems to be included in the note next above. In 1654 is added "four Joyne Stooles," still found in 1662. At the end of '59 is added in a different hand from the rest of the inventory "One greene Carpitt for y^e Communion table bought y^e 14 July 1659. Cost [blank]," which appears in '62 as "one Cloth Carpet frenchgreene for y^e Communion table."

THE PYRENEAN NEIGHBOUR; OR, THE VICINAL SYSTEM IN THE WESTERN PYRENEES.

By A. R. WHITEWAY.

Nul seigneur sans terre was essentially a maxim of mediæval Pyrenean peoples, and especially of the Béarnais. As men ceased to be nomad, fixity of domicile and tenure greatly grew in public estimation. When the same households began to reside year after year side by side, a particular bond of union, distinct from the conventional tie of blood,¹ between their members for utilitarian reasons became by degrees the well established rule. And so the householder, and the house he continuously occupied, were at length universally acknowledged to bear a definite relation to his neighbour and such neighbour's house, not wholly dissimilar to that existing between members of a regular guild or confraternity. For man living in community is rendered more and more social by development as his surroundings become well fixed and defined, since of these it is impossible for him to be independent. "Generated by processes of growth and development continuing through centuries," and having its origin in the social needs of the dwellers in the Pyrenean district, which were similar to those of many Kelts and Germans, the vicinal system, if this term may be allowed to express the relation between neighbours, did not spring from any Latin source. Nor did feudalism or chivalry, which it long preceded, give it impulse or a helping hand. Christianity, though not ecclesiasticism, fostered its progress, and the isolation of those regions, where it mainly flourished, accounts in part for its existence there at the present day. But it is of course in the main its apt vitality that has enabled such bond of local contiguity to withstand for so long all malign environing action, and which constitutes its chief interest, as otherwise it would long ago have perished

¹ I.e. local contiguity instead of the previous agnatic bond became the basis of common action. Maine, *Ancient Law*, p. 129.

everlastingly. To explain this vigorous vicinal system, which existed also in Italy,¹ and especially the part it played in the life of mediæval western Pyrenean peoples, is the purpose of the present paper.

The designation of him who had a local habitation and a name in a fixed and limited Pyrenean district was *Besi*, *Vesi*, *Vecino*, or *Voisin*, the primary meaning of which was probably near-dwelling householder. Thus the word roughly answers to our "neighbour," but with a more restricted signification in the case of the French term. Though not peculiar to the south-west of France and north-west of Spain, the relation of *Voisin* was characteristic of and implied more there than elsewhere, and, handed down as it was from generation to generation, has largely made for the advantage of those who have enjoyed it up to our own time. Reference to the *Voisin* is frequent in Pyrenean folk-lore as in--

Que bau mey u Besii
Qu'u cousii

(*Voisin vaut mieux que cousin*), which is the Béarnais variant for the better known proverb, *Mieulx vaut prochain amy que long parent* (i.e. *parent éloigné*), itself somewhat reminiscent of the Anglo-Saxon "Call me cousin but cozen me not." In southern France the letters B and V are usually interchangeable, so that we find *Besi* and *Vesi* used indifferently for neighbour, and *Besiau* or *Vesiau* for a neighbourhood or confraternity of neighbours, thus giving ground for Scaliger's famous jest, *Beati populi quibus vivere est bibere*.

Obviously the *Voisin* has to be regarded in two lights, firstly, in relation to his public duties to the *Besiau* or neighbourhood to which he belongs, and, secondly, in the closer and more restricted sense of his private duties to individual members of the *Besiau* in which he dwells. The latter is the more strictly social point of view, and brings into particular prominence the idea of fellowship and interdependence that undoubtedly existed between him and his brother *Voisins*. The vicinal institution is rather Keltic than Roman, the *Incola* and *Peregrinus* having respectively but a general likeness to the neighbour and

¹ See Ducange's *Glossary*, *sub voce* Vicinatum.

the stranger, and the *Populus* and *Plebs* (*pleo*, persons that fill up) even less. If the *Codex de Incolis* and the *Jus Civitatis* throw little light on the *Voisin* of the Pyrenees, the family resemblance between the Gallic *Nabac* and the *Vesiau* or confraternity of neighbours cannot be overlooked. Both alike met in the open air, and busied themselves about the same matters; both borrowed from the Latin names for their officers, e.g. *baile*, mayor, *maire*, constable, *connetable*, the duties of the latter being exactly those of the *costiero* of Navarre. Many other social features have been developed in different countries by, and so have become common to, various Keltic races,¹ as, for example, to the Highland Crofters, the Bretons, and the peasants of the Pyrenees. But the superior climate and soil which was the patrimony of the latter,² and their freedom from feudal oppression as well as early adoption of the *trinoda necessitas*, allowed them to do for themselves far more than was possible in the case of either of the other peoples. Thus many Pyrenean institutions obtained a development and a stability which is nowhere to be observed among less favoured nations, though of somewhat similar origin. Nor were these features wholly confined to Kelts. Of the same kind, for example, were the *compurgatores*, jurymen, and aldermen of Saxon settlements in Transylvania. To return, however, to the Pyrenees for the purpose of instancing there particular neighbourhoods, many of which occupied a strong defensive position *à cheval* on those mountains.

In Béarn, the *Voisin* was sharply distinguished from the *Habitant* and the Stranger, and formed one of the *Vesiau* or privileged citizens. This was still more markedly the case in towns, especially in those to which a charter had lately been given, as for example at Oloron.³ But, *mutatis mutandis*, it obtained likewise in all other towns, and also in country villages. In Bigorre,

¹ Cf. (a) The bonfires on St. John's Eve still universal in south-western France and till lately in Ireland. See *Nineteenth Century Magazine*, 1900, p. 310. (b) The Highlander's bonnet and the Pyrenean *beret*, though the *beret* was only adopted a single century ago. (c) Treaties between the Highland clans and Pyrenean valleys and sanctity of

oath ratifying them, Johnson, *Hébrides* (Cassell's cheap ed.), pp. 156 and 175.

² As showing the poverty of the Highlands, see Johnson, *op. cit.*, p. 162.

³ The foundation of these towns had no religious basis as had the *Cité Antique*. See Fustel de Coulanges, *La Cité Antique*, 18th ed., Paris, 1900, p. 151.

the *Voisin* had the right of *Voisinage* in his particular valley, or republic as it was often called, just as the *Civis* had the *Jus Civitatis* or *Droit de cité* in other parts of the south of France.¹ Nor is there any material difference to be noticed in the case of the Basques. For in Navarre the *Vecino*² (sometimes a freeholder, sometimes a householder) and *Vicindad* were practically the *Besi* and *Besian* of Béarn, Bigorre, Labourt, and Bayonne. Indeed, the same may be said of the Gascons as well. So that on both *versants* of the Pyrenees, and even farther afield, the neighbour was a descriptive relationship, as fully recognised as was that of the citizen elsewhere, while the mutual obligations of the former were much more clearly defined and far-reaching than were those of the latter category of individuals.

The truth is that this very *Droit de Voisinage* or vicinal system forms a neglected and unwritten chapter in the history of social institutions. It is not the exclusive property of any one race, but has its origin in the general want of mutual protection felt alike by many segregated peoples at similar stages of their respective evolution and development. We find it, for example (as has been already said), in full force in the Saxon villages of Transylvania. Nor are traces of it wanting in Justinian's Code.³ Yet nothing germane to the vicinal system is to be discovered in the Code of Alaric,⁴ which was the outcome of the earlier Roman influence upon barbaric legislation, inasmuch as Gaius, whose writings mainly inspired the Visigothic Code, does not appear to have dealt with the subject at all. The system, moreover, is in some degree noticeable about 1773 in the Western Highlands of Scotland. For Dr. Johnson thus writes,⁵ "Land is sometimes leased to a small fellowship, who live in a cluster of huts called a

¹ Of large towns, *Magna civitas magna solitudo* is true, because there exists not in them the fellowship of smaller neighbourhoods. See Bacon's *Essay on Friendship* (No. 27).

² See *Quarterly Review*, No. 364 (Oct., 1895), "Village Communities in Spain," *passim*.

³ Just. Cod. IV, XI, 55-58.

⁴ But the *Vecino* is recognised in the

Fuero Juzgo, in Lib. VIII, Tit. V, c. 4, as also is the *Vicanus* and *Convicanus* in Cod. Theod., Lib. XI, Tit. 24, c. 1 and c. 6. Cf. the *Μετοικιστικαί* of Byzantine Greek law.

⁵ Johnson, *Hebrides*, ed. cit., p. 105. In 1800 the crofters had their grazing land in common. See *Nineteenth Century*, Oct., 1900, p. 658.

tenant's town, and are bound jointly and separately for the payment of their rent." The proprietorship of land by confraternities was and still is a distinctive feature in the Pyrenees. In our day it is particularly to be observed in operation in the *pacages* of the valleys of Ossau and Aspe, and in the village lands of Llanabes in Leon.¹ The vicinal system, however, went far further than the mere tenure of land. It was a necessity to existence, and the basis of a closer form of citizenship in every mediæval West Pyrenean aggregation of inhabitants, and notably in the towns. Indeed, the vicinal system in the Pyrenees, both in town and country, was not only a more prominent feature there than elsewhere, but it differed also in various important particulars. In many countries, for example, all that was expected of neighbours was that they should not do harm to each other. Here they were expressly enjoined to do all manner of good. The proverb, "A man does not owe a fire-brand to his neighbour," has no bearing on life in the Pyrenees, since in Navarre, for example, the law said expressly that he did. The presumption of law, too, usual in Germany that, if a serious crime was committed in a neighbourhood, the neighbours knew who was its author, and were liable to torture if they did not inform against him, had no application in the Pyrenees. Nor was the commune nor the neighbourhood recognised as being so fully liable for any crime committed within its borders, as was the Irish sept or the Saxon hundred.² Again, no limitation upon the nearness that neighbouring houses might be built to each other seems to have been in force. Nor were the regulations as to servitudes from contiguity in the Pyrenees either strict or explicit in mediæval times. Yet both at Bordeaux and Toulouse there was an express provision that a neighbour should have a right of way over his neighbour's land, he paying any damage thereby caused to growing crops.³ But the carrying on of noxious trades was not expressly forbidden, nor the disturbance of neighbours by noises and the like.

¹ As to Pyrenean collectivism, see "Pyrenean Customs," *English Historical Review*, Oct., 1900.

² See Glasson, *Le Domaine Rural*, p. 167.

³ François, *Observations* (A.D. 1615), p. 274.

It seems never to have been supposed by legislators that such unsocial conduct could obtain among neighbours.

The vicinal system was not identical with Teutonic or other village communities, though it is perhaps the outcome of the latter. The Teutonic system applied to both town and country, and belonged to a later stage of development. *Voisins* were not proprietors of the district they occupied, but only enjoyed certain privileges, sometimes, however, in respect of lands situated in it. The *patria potestas* was not nearly so marked in the vicinal system as in the village community, while the transition from collective to individual property had been to a greater extent reached under the former than in the case of the latter. The power of absorption of strangers, too, was far more alert and elastic in the former¹ than in the latter, inasmuch as the vicinal system was not to the same degree an association of kinsmen even in its earlier days. In the village community the primary object was joint tillage of the soil² of which it was proprietor. This was not so under the vicinal system. Finally, under this trades remained not so universally in the hands of particular families, and above all the obligation of mutual duties was brought into far greater prominence. Perhaps not much of the true distinction between *villa* and *vicus*³ applied to the village community and the vicinal system respectively; yet this distinction must not be quite lost sight of in considering their relative beginnings, or even their subsequent development.

An excellent example of its scope is afforded by the provisions of the ancient⁴ customs of the town of Bayonne, which devote various articles to the privileges, duties, and responsibilities of *Voisins* in a vastly more marked way than do its reformed customs of the sixteenth century. An instance of its application is afforded in the contention of the inhabitants of the neighbouring fishing village of Biarritz, that they were themselves, in reality, *Voisins* of Bayonne, and so free from

¹ Maine, *Village Communities*, p. 175.

² At Toulouse, for example, all that a man had to do to become a burgess was to make the declaration, *Ego volo intrare Tholosam et facere me civem Tholose*.

³ Maitland's *Domesday Book and After*, p. 333.

⁴ Rubrs. VIII, Art. I; XVIII, Art. I, etc.

the obligation of paying entry duty upon the fish they brought into that town, a contention subsequently disallowed, however,¹ by Edward I. at Oloron in Béarn.

That *Voisins* were a distinct body, forerunners of the burgess class, can be seen from provisions of these customs of Bayonne which were reduced to writing in 1273. For example, the Episcopal Court (*L'Officiau de Baione de labesque*) had no jurisdiction over *los Vesins de Baione* except in matrimonial matters, usury, and gifts for pious purposes.² Moreover, these customs prescribe what the mayor is to do with regard to the *Voisin*, accused of crime, who has taken sanctuary in the cemetery.³ The man claiming to be a *Voisin* had to make oath to be faithful to the king and commune, and to be always ready to act for the honour and service of the city, and never to summon a *Voisin* before any other jurisdiction than that of the communal courts.⁴ Thus *Voisins* came to be those over whom the mayor and *echevins* had jurisdiction.⁵ They were, in fact, the members of the commune. The right of *Voisinage* was obtained by birth, marriage, or sojourn for a year and a day in the city, provided in the latter case that the oath above mentioned had been duly taken, and this same right could be renounced only before the mayor in full court,⁶ after which the ex-*Voisin* had to quit the city. The right of *Voisinage* implied, in the eye of the law, participation in the franchises and privileges given to the city by the Dukes of Guyenne, such as exemption from custom-duties, as well as sundry important commercial facilities. And these were the matters referred to in the oath, taken, as for example in 1261, by the *Voisin* Auger de Gavarret,⁷ "I will undertake no machination against any of my neighbours." These privileges were the cherished possession of every city or district which had a For, and such For was the charter which guaranteed its inhabitants in the same.

¹ Balasque, *Études Hist. sur la Ville de Bayonne*, Tom. II, p. 494.

² *CI*, Art. 2.

³ *Ibid.*, *CII*, Art. II.

⁴ *Ibid.*, *VIII*, Art. I. Cf. For de Morlaas, Rubr. *LIII*, Art. 190, for when a man is *Voisin*. Also Beauvais Communal charter (twelfth century), quoted by

Masson, *Medieval France*, p. 49. Note, too, the social nature of the oath as compared with that of the mere citizen (Pollux, *VIII*, 105 and 106), which was mainly religious in character.

⁵ *Ibid.*, *XX*, Art. I.

⁶ *Ibid.*, *XVIII*, Art. I.

⁷ Rymer, *Fœdera*, I, II, p. 67.

But besides privileges, the *Voisins* of Bayonne and elsewhere in the Pyrenees had also obligations which they owed each other for their common good. For instance, when a *Voisin* summoned any person before the mayor, he had to be supported in his demand by two other *Voisins*,¹ and, if such *Voisins* would not appear at the request of the claimant, they had not only to pay a fine to the town, but damages to him as well. As a matter of fact, the court of the *Voisin* being that of the mayor and *échevins*, he was tried by his fellow *Voisins*, while the stranger went before the provost, who was the king's nominee, and the clergy before the official of the bishop. So that in his court he had trial by a jury of his peers, and the right to compel the attendance of his fellow *Voisins* in support of his case.

In Béarn, the term *Vesiau*, or *Voisinage*, was especially used of the class that subsequently became the *bourgeoisie* of a town. Under the For d'Oloron,² any man who had resided there a year and a day became *ipso facto* a *Voisin*, and it was the duty of the Viscount of Béarn to defend him against any other lord. The For of Morlaas, however, which applied to the greater part of Béarn, enacts that, in order to become *Voisin*, the postulant had, after fulfilling certain conditions, to be received as such, and to take the appropriate oath.³ In the Latin edition of the For of Morlaas which governed Orthez, the sole persons who were entitled to the privileges thereby granted were,⁴ *Burgenses Vicini et Habitatores Villæ Orthesii, solventes et contribuentes in donis domini et talliis villæ*. It was the Jurats of the town of Orthez who received the *Voisin*, and to them and to the Baile the oath was taken. About the fourteenth century he swore on the missal and cross "to be a good, upright, faithful, and loyal *bourgeois* of the Viscount and of the town. That he would work for their profit, good, and honour, and oppose all damage that he knew was intended against them." If he had no house in the town himself, the proposed *Voisin* was obliged to find a surety, until he acquired such house, and they both pledged, as security

¹ Cust. Bay., XXXVI, Art. I.

² For d'Oloron, Art. V.

³ For de M., Rubr. LIII, Art. 190.

Marca's *History of Béarn*, v, p. 339.

that the new *Voisin* would fulfil all the obligations of his oath, the whole of their property, both movable and immovable.¹ From this it will be seen that, at all events in Béarn, the duties of the *Voisin*, which were brought into especial prominence, were those towards the sovereign, although his obligations to his town, and therefore of necessity to his fellow *Voisins*, had been by no means overlooked. The reciprocal advantages that he gained for himself were as follows : (a) Freedom from military service, except in the case of one man per house, and even here service for not more than nine days three times a year. There was no obligation throughout all Béarn upon the *Voisin* to serve in Spain against his will, and if taken beyond the limits of Béarn, as into Bigorre, Armagnac, Marsan, Dax, or Soule, he had to be fed and his equipment carried for him.² (b) Freedom from all import duty, and the privilege of paying to the Viscount only such charges and fines as were expressly prescribed by the For.³

Moreover, under the old For of Béarn,⁴ the *Voisin*, if sued by the Viscount, could demand that his appeal be heard in his own County Court. Under the new For of Henri II., reception by fellow *Voisins* is obligatory.⁵ Also every son of a *Voisin* is a *Voisin*, as well as the man that marries an heiress who is the daughter of a *Voisin*. But the latter has to take the oath. If one, who is not himself a *Voisin*, marries the younger daughter of a *Voisin*, he does not thereby become himself a *Voisin*, until he has fulfilled the requirements of his district, as, for example, by paying taxes and acquiring a house within its boundaries.⁶

The privileges of Lourdes⁷ give the protection of the *Voisins*, and the right to be judged like them before the local judges, to all, who, having resided in the town a year and a day, show the fixed intention of becoming

¹ *Archives of Orthez*, AA, I, fol. 42, and BB, I.

² For de Morlaas, Rub. XXII and XXIII, Arts. 34 and 35.

³ *Ibid.*, Rub. XXVII.

⁴ Old For, Rub. LIV, Art. 190. As to *Voisin's* privilege in seizures, see *ibid.*, Rub. LIV, Art. 144.

⁵ Cf. the consent of *Vicini* to recep-

tion of Homo Migrans under *La Loi Salique* (*Les Communes et le Domaine Rural*, par Glasseon, p. 29, Paris, 1890).

⁶ New For, Rub. de *Qualitatz de Personnas* (No. 55).

⁷ Art. 3 (A.D. 1379). Cf. custom of St. Sever cited in Guyot's *Repertoire*, Tom. XVII, 625.

domiciled there, provided their conduct has been irreproachable in the past.¹ The same protection is accorded by the privileges of Montfaucon, while those of Maubourget (A.D. 1309, *Art.* 6) prescribe that if a man settles there with the intention of becoming a *Voisin*, and shows himself in the *Vesiau* as a *Voisin*, and passes a year in the town without being the object of unfavourable remark, he is to be considered as a *Voisin* in due course.²

From these specific enactments, it will be seen that the mere *Habitant* or *Poblador*, especially in a new town or village (*Bastide*) readily became a *Voisin*, and as such obtained the full privileges of a burgess of such new locality. These privileges, besides the political benefit of freedom from uncertain taxation and war service included as well, not only a share in the civil government of the place, but an aliquot part also of its communal property.³ The latter privilege was sometimes of great value, as at Salies de Béarn, where it was clearly defined by the regulations of A.D. 1537. But it had also its corresponding liability. For not attending a meeting of the *Vesiau* duly summoned was often punished, as, for example, under the Statutes of Luz, by having to give a litre of wine to such *Voisins* as did their duty in this regard, as well as a pound of wax, to the church of the place.⁴ Subsequently none⁵ but heads of families were summoned, and eventually only delegates, but these were always *Voisins* until the Revolution. In process of time, the right of being *Voisin* was conferred for services rendered, as, for instance, at Pau⁶ in the case of Guicharnand in 1663, and then the right of *Voisinage* became in effect the possession

¹ The consent of the *Vicini* was necessary for the establishment of the stranger under *La Loi Salique* (De Coulanges, *L'Alleu et le Domaine Rural*, p. 187). As to the solidarity of *Voisins*, see De Coulanges, *op. cit.*, p. 183, and as to succession to *Voisins*, p. 191, and as to their responsibility for each other, Glasson, *op. cit.*, p. 167.

² See, too, Charta de Commune pour Baguères de Bigorre (A.D. 1191), Daverac Macaye, *Essais*, I, p. 235. Note that the serf, whether Ceyssaur or Questau, was a *Voisin* in Bigorre (Lagrèze, *Hist. du Droit*, p. 44).

³ Cf. the condition of things, for example, in England under the customary Germanic law. Some folk-land was used by the members of particular townships to the exclusion of strangers (Sir F. Pollock's *Land Laws*, p. 21).

⁴ Lagrèze, *Droit dans les Pyrénées*, p. 63.

⁵ Originally the *Voisin* was not of necessity though usually head of a family.

⁶ As to the privileges of the *Voisins* of Pau, see Dugenne, *Panorama de Pau*, p. 351, note 3.

of the freedom of the town. Thus one Pédarrieu, living at Gelos, was *Voisin* both of Pau and Gelos in 1734. Sometimes a fee was payable, viz., 500 *livres* for *Bourgeois* becoming *Voisins* of Pau, and 50 in the case of peasants, which fee in 1774 was for *Bourgeois* raised to 1,000 *livres*.¹ Such payments varied in different places and at different periods. For example, Larcher was elected *Voisin* of Vic-en-Bigorre, of which town he came from Picardy to be secretary, merely upon condition that he set up two crosses, one on the road to Rabastens and the other on that to Tarbes.

In Navarre, for a year and a day a christian could stay in any town which had no particular lord, with his arms and lance, as well as hire a house for his furniture. In that state he was considered a resident (*mora-dor*), and therefore became liable to military service, and could forthwith demand to be classed as a *Vecino* or *Voisin*. This demand he had to make three times. The *Vecindad* or position of *Voisin* could also be obtained by marrying the daughter of a *Vecino*, or in the case of a noble automatically if he had property in the town. The position of *Vecino* was lost if the holder would not conform to the opinion of the majority of his fellows or to the customs of the town. In such case he became an outlaw, and could get nothing at the hands of his former co-*Voisins*, who owed him no further obligatory service than to fetch a priest to confess him on his deathbed, a sieve (*tamis*) to sift his flour to keep him alive, and a little fire from his neighbour's hearth.²

The difficulty of showing the distinction between *Voisin* and *bourgeois* in the towns is only apparent. They melted into each other. All forms of civilisation do so. They have their beginning and growth in one system, and then give rise to another.

The interests of town and country seem often opposed and the consequent customs differ. In the country older forms of civilisation survive. The town necessarily bulks larger in history and in written documents than does the

¹ Cf. the purchase of the "Neighbour Right," which used to be common in Thuringia and Schwartzburg (see Zedler's *Lexicon*, *sub voce*).

² For Général of Navarre, v, Tit. XI, c. 3.

country; but obviously in the last resort the town is dependent on the country for food and provisions, and cannot subsist without it. Hence, to employ Latin terms, we know more about the *civitas* and the town than we do about the *respublica* which surrounded it, fed it, and followed its own customs. It is in these customs that the vicinal system is best seen. It is the missing link between the tribal system and the town or the feudal system. They mingled no doubt and subsisted side by side and at last only in survivals. But this is no answer to the reality of each of the systems.

Feudality in France passed into an almost absolute or highly centralized monarchy, yet some of the worst abuses of feudality lasted till the Revolution, and in the Pyrenees feudality lived all but side by side with a nearly autonomous vicinal system. Such is the view of Mr. Webster. Originating from such a source it can not be lightly pushed aside.

But besides the privileges above mentioned, the *Voisinage* had not only the administration of, but also the beneficial interest in all property belonging to the Commune, which, as at Salies de Béarn in the case of its salt springs, and in many mountain villages in the communal lands upon which cattle were run, and as at Artigelouve in the matter of the forest where the *Voisins* could get wood and their pigs acorns, was not seldom of considerable value. The *Voisins*, too, in their Assembly, often decided upon making treaties of peace (*lies et paxeries*) with other villages or valleys. Instances of such were the treaty between the valleys of Aspe and Lavedan in 1348, and between Bagnères de Bigorre, Tarbes, and Ibos¹ in 1292. Also that between Bareges in Bigorre and Broto (Aragon) in 1390,² under which a yearly rent, or fines for breaches thereof, were payable to the offended community, i.e. to its *Voisins*. These powers, it will be seen, were in their totality considerable, and thus the position of *Voisin* in public matters was undoubtedly one of far-reaching importance.

So much for the public advantages and responsibilities of the *Voisin*. What presents itself next for considera-

¹ Archives d'Ithos (Bigorre).

² Lagrèze, *Droit dans les Pyrénées*, p. 297.

tion is the private duties he owed to his fellows, which were essentially reciprocal in character, and permeated all the more important relations of life. These exist and are in force, though in a somewhat modified degree, even at the present day, being in this respect peculiar, at all events in their scope and extent, to the district of the western Pyrenees. In mediæval days, the obligation of being actively good to one's neighbour often had the sanction of the law. In Navarre, the man who refused his neighbour a light for his fire was mulcted in a fine of sixty sols.¹ Lagrèze says that any violation of the right "*de bon Voisinage*" was there punished as a crime.² It was not merely the removal of a neighbour's landmark, which under the Jewish law as well as that of the Twelve Tables was an accursed act, and delicts of a similar kind that were considered infamous, but also passive neglect of kindly offices, such as more nearly resembled the brotherly kindness enjoined by the Sermon on the Mount. Between the treatment of the stranger and that of the *Voisin* there was however all the difference in the world. "Here is the new curate, let us heave a brick at his head," was the old Pyrenean method, just as it was but lately that of the Black Country collier, with reference to the stranger, but love your neighbour as yourself, the ideal of every good *Voisin*, in the case of his own neighbour. When a new-born child was expected to make its advent in the *voisinage*, it was the *Voisines*, as it is to this day in outlying districts, who took the place of the *sage-femme*, or fetched her, if haply she was to be found. These were they who conducted the mother to church, and assisted not only in the preparation, but likewise in the eating, of the christening feast. The nearest neighbour on the side of the house towards the church summoned the others to a wedding, at which his eldest unmarried daughter, if he had one, was bridesmaid and witness, as it was he likewise who fetched the priest to administer the last sacraments to his fellow *Voisin* upon the bed of death. He too conducted the funeral and bore the large silver cross in front of the bier, and with his fellows dug the grave, in

¹ For Général Nav., Lib. III, t. 107, c. 7.

² *Navarre Française*, Vol. II, p. 89.

villages where there was no grave-digger, also scrupulously attending all memorial services. When a *Voisin* changed his residence, or got in his harvest, he was actively aided by his fellow *Voisins*, especially those who lived on either side of him, i.e. the *Premier* on the church side, and the *Contre Voisin* on the other. And these good offices were done whether the *Voisins* happened to be on friendly terms with each other or not. Such duties, it will be noticed, were of greater value in the country than in the towns, so that the more onerous nature of the private duties of the *Voisins* in the country made up for the lack and took the place of public obligations that occupied the *Voisin* of the town.

No simple task is it to draw, from the nineteenth century standpoint, an accurate picture of the vicinal system as it is thus shown to have existed in the middle ages throughout the western Pyrenees; but that the relation of neighbours one to another, both in town and country, was then regulated upon a fixed system is made abundantly manifest by contemporary testimony. This system had its origin in the necessities of social life in far-off days, when men were no longer nomad, and did not proceed from any religious beginnings, as did the tribe or the *Cité*. It attained a fuller development as land ceased to be the property of the tribe and was not yet wholly in the hands of individuals, or even of house communities. *Voisinage* was the outcome of, or the expression given to, society by the then existing collectivism, and it fructified in order of time before individualism had taken root. Although Christianity was busied in impressing upon its followers their duties, first towards God, and afterwards towards their fellow-men, and feudalism was exhausting itself in upholding and enjoining the rights of feudal lords, what the tribal conscience of Pyrenean peoples in mediæval times mainly urged upon them was to love their neighbours as themselves. During the period in which this principle was approaching its full development into a general custom, the householder, male or female, being in conjunction with his or her family the responsible unit of contemporary society, grew more and more tied to neighbour householders and their families by the exercise of reciprocal duties and the recognition of

mutual obligations. These latter were in process of time clearly defined, and the neglect of them entailed popular odium, and in some cases even fine and punishment.

The duties in question were like the Roman *obligatio* in contract strictly bilateral, and so not infrequently onerous, if sometimes profitable and clearly advantageous. Their twofold character, *i.e.* towards the body politic and towards each other, has been already indicated. If further illustration on the latter head were required, it might be gathered from such different obligations, as the universal duty of nearest neighbours' daughters to be bridesmaids, and the right of the neighbour, derived perhaps from that of the *vicinus* in Roman times, to the pre-emption of adjoining immovable property. In the larger sense, the whole law of servitudes, as in operation in the Pyrenees, was rather the outcome of the vicinal system than taken bodily from Roman law. In like manner, the church bell owed its importance not so much to its ecclesiastical usefulness as to being the chief means of communication among the inhabitants of a "neighbourhood." They were, by its different sounds, not only summoned to services of their common church, but informed too of periodical visits of the veterinary surgeon and blacksmith, the time to cut the communal wood, and the hour at which to go to bed. Thus it might be shown that in reality the whole life of the people centred round the vicinal system, for which hitherto not even a name has been found, and upon which as yet no monograph exists, though it was discovered by Mr. Webster some years ago.¹

Its light shines, if somewhat less brightly than of yore, in Béarn, Bigorre, and Basque land to this hour, and goes far to account for the comparatively happy lives the people live, and ever have lived, in and about the western Pyrenees.

In brief, the survival of this system is due to its eminent fitness, just as its evolution was to the imperious wants it so well supplied. But as these wants have now lessened, so likewise has its influence. There-

¹ Mr. Webster on "Le mot République," *Bulletin de la Société des Sciences et Arts de Bayonne*, 2me semestre, 1898, p. 157.

fore, now that it is on the wane, neighbour may with reason say to neighbour,

“*Damnosa quid non imminuit dies ?*”

ADDENDA.

The following is the latest published definition of *Vecino*, *Voisin* :—

De como es vecino. Todo ome que faze fuego en alguna vecindat é oviere peynnos dalbarda, o X puercos o ovejas o cabras, o herdat oviere alguna en el lugar, puede ser fiador en toda cosa.

“*How one is a neighbour.* Every man who lights his fire (*i.e.* has his hearth and home) in any neighbourhood (vicinity) or should have . . . ? or ten hogs, or sheep, or goats, or should have any inheritance in the place, can be security (bail) in everything.”

It is difficult to find any translation for “peynnos dalbarda.” It is either some dress or weapon qualification, or else one of property, the former most probably. But the thing to observe is, how the being a neighbour brings with it the idea of mutual obligation, as the very essence of the condition “puede ser fiador en toda cosa.” “*Fueros inéditos de Viguera y de Val de Funes* (in 482 Articles) *otorgados por Don Alfonso el Batallador* (King of Navarre 1104–1134)” in the *Boletin de la Real Academia de la Historia*, November, 1900, 368–430.

The *Vecino* is said to mean villager in *Quarterly Review*, No. 364 (October, 1895), quoting a passage from *Siculus Flaccus*, where *Vicinus* (*vicus*, village) would seem to bear the same meaning.

The strength of the idea of the *Voisin* in the Pyrenees is well seen in a kind of versified catechism (not in question and answer), *Le Tableau de la bido del parfait Chrestia en berses* (“The Picture of the Life of the Perfect Christian in Verse”), by Père Amilia, of the Order of St. Augustin, written in 1673 (reprint, Foix, 1897). In the chapter at p. 272, we find—

L'injustice faito al gazailhat inoucen de la mort del bestial. (“The injustice to the metayer, insured person, or hirer on cheptel—gazailhat covers all these—innocent of the death of his cattle.”)

L'amour que cadun a de sa proprio natura
 De l'amour del proutchen diu estre la mesure.
 Qui jamai se bol mal, qui n'aimo pas soun cos,
 E qui n'aimo l'proutchen, qu'es un os de nostre os ?

"The love which each has (to himself) of his own nature
 Should be the measure of the love of the neighbour.
 Whoever wishes himself ill, who loves not his own body,
 And who loves not the neighbour, who is a bone of our bone ?"

This injustice was attempted to be got over by insurance, as we learn from Mr. Webster's *Les Assurances mutuelles de Bétail et le Cheptel*, Bayonne, 1894.

Of those who put the law in force against the *gazailhat* contrary to the *coutume* we have the striking verses—

La coustumo n'es pas uno le pla foundado,
 Se de las gens de be n'estado aproubado.
 Uno le que n'a pas de Diu l'aproubacin
 N'es pas tant uno le, qu'es uno corrupciun.

"The custom is not one well founded
 If it has not been approved by people of worth.
 A law which has not the approval of God
 Is not so much a law as it is a source of corruption."

Gazailhat, *gazaille*, *miey-goà-danhcrie* (Custom of Soule, Rubr. XX) *nodic*, *migodein*¹ is a very important word; it was certainly in use among the Visigoths. In its Latin form *gasalianus* it is found in Galicia in 572, and in other forms in mediæval charters in Latin and other dialects from Languedoc to Galicia (*cf.* Ducange, s. v.). It is probably connected with the German *gesell*, *gesellschaft*.

In his lately published *Historia de España y de la Civilización Española* (Barcelona, 1900) Don Rafael Altamira says, speaking of the administrative organisation of the Visigoths (p. 198), that the country population "se reunia tambien en assembleas de vecinos (Godos y Romanos) llamados *conventus publicos vicinorum*, para decidir acerca de las cuestiones de propiedad rural, division de tierras, ganaderia, persecucion de siervos huidos y otras de interés local." This is distinctly the *beziau* in action. It is certainly as much Gothic as Keltic.

¹ Harispe, *Recherches Historiques sur le Pays Basque*, II, 416, note.

ON THE NATURAL FORMS WHICH HAVE SUGGESTED
SOME OF THE COMMONEST IMPLEMENTS OF STONE,
BONE, AND WOOD.

By T. McKENNY HUGHES, M.A., F.R.S., F.S.A., F.G.S.

INTRODUCTION.

There are few questions of greater interest than those raised by an investigation of the various methods by which primæval man has tried to supplement the appliances with which nature had endowed him in common with the lower animals.

I have been approaching the question in a tentative way for many years, and have from time to time brought forward instances in which it appeared to me that the forms of certain instruments were originally suggested by natural objects.¹ I have now gained so much additional knowledge respecting it that I have thought that I might bring the whole subject forward before the Institute.

When, with a view to such an inquiry, we are examining the instruments which are in use among races of low civilisation, we must consider whether they are works of art involving thought and experiment, or are merely an adaptation from natural objects, the use of which may easily have been suggested by accident; whether they are common appliances necessary to meet the requirements of every-day life, or articles of luxury or dignity, the manufacture of which would demand exceptional skill and direction.

In tracing the migration of man by the implements which he has left behind him, one of the first questions to be asked in respect of any work of art upon which we rely as evidence is this: Was it imported or made on the spot? In dealing with objects commonly made of wood,

¹ *Camb. Ant. Soc.*, October 21st, 1895,
"On the derivation of a boomerang
from a cetacean rib."

Soc. Ant. Lond., February 4th, 1897,

"On the derivation of the battle-axe, the
throwing-stick, and the boomerang from
the ribs of the cetacea."

or bone, or stone, we must inquire whether the trees, or animals, or rocks from which they were manufactured were native or foreign.

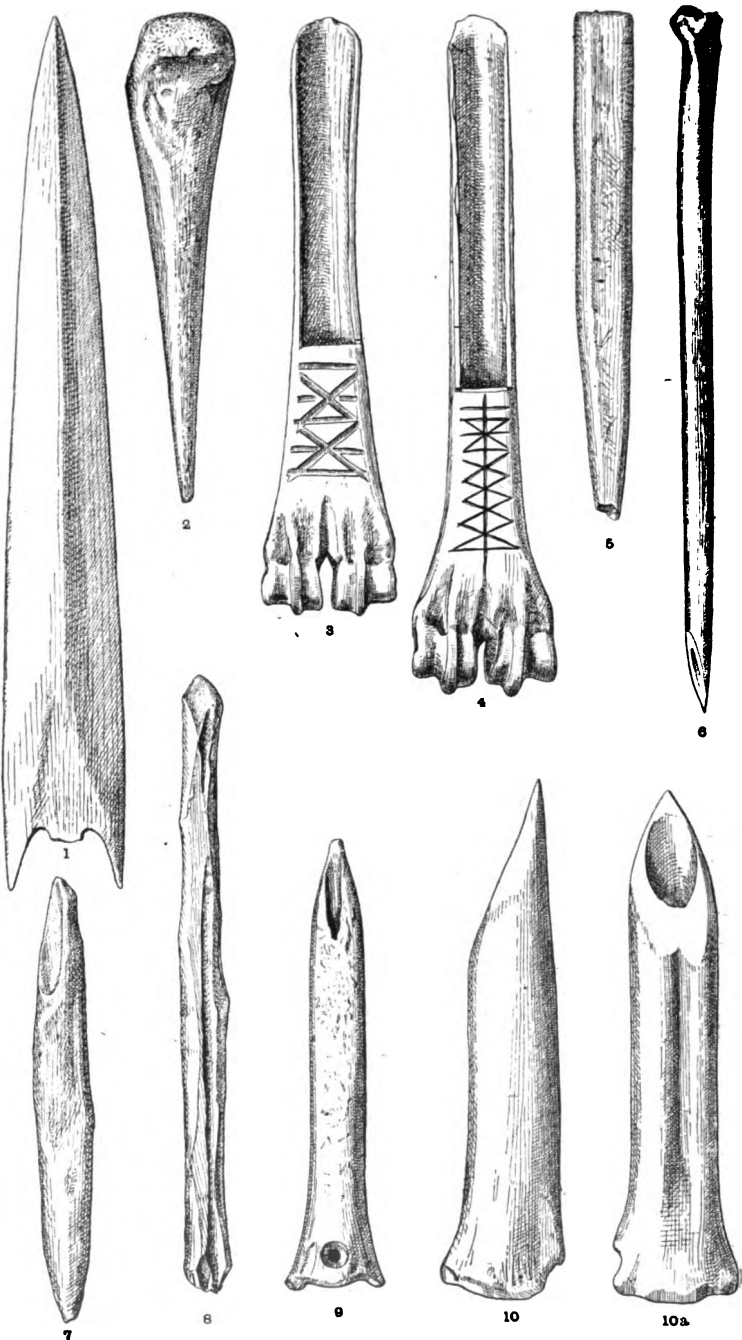
As I have elsewhere shown,¹ this line of inquiry leads to very important generalisations respecting the distribution of neolithic implements in the British Isles, where a difference of form confirms the inferences that would be drawn from the difference of material, and enables us in certain cases to distinguish imported from indigenous specimens.

THE IMITATIVE FACULTY AMONG RACES IN A LOW STAGE OF CIVILISATION.

From observation of the habits of races in an early stage of development we can often explain the origin of forms which have been modified and adapted to special uses in later times and under higher conditions of life. We can understand the cause of the conservatism which has been observed among savages, the conservatism of the more advanced in checking the unreasoning or careless experiments of the undeveloped intelligence, to which, nevertheless, much of the manipulation of the routine work of daily life must be left. The imitative faculty was thus strongly developed.

There are many instruments and manufactured vessels the form of which has been obviously suggested by natural objects. For instance, the gourd is obviously the original of many primæval water-bottles. Baron von Hügel has pointed out to me the resemblance of some stone drills and arrow-heads to sharks' teeth, and informs me that sharks' teeth are actually used by some tribes in the same way as the stone instruments; and it has often been shown that the earliest forms of metal weapons seem to be merely copies of those which had previously been made in stone. When, then, we find a battle-axe or *bâton de commandement* resembling a cetacean rib, not only in general outline, but also in many details of form, we may fairly indulge in the speculation as to whether this implement may not have originated in the bone from which it seems to be so closely copied, and we may, in

¹ *Cambridge Review*, XII, 44.



the same way, carry our investigations onward into many suggestions arising out of similarity of form, some of which will commend themselves, and some of which must await further evidence, but the greater the number of cases the stronger does the evidence for each become.

THE USE OF BONE.

Of all the materials suitable for the manufacture of weapons or objects of every-day use bone is the most generally available and suitable. It is of common occurrence and great variety of form. It is easily worked and yet most tough and durable. It comes half-way between wood and stone, and many an instrument, adapted from a bone, was reproduced in stone when greater hardness or a keener edge was wanted, and in wood if there was not time or opportunity to manufacture the required form in harder material.

The natives of New Guinea make their spears of the cassowary bone. In the hands of the Yule Islanders, the teeth of the kangaroo and "the tusks of the wild boar are implements of the greatest utility," and "the forks made from the leg-bone of the cassowary, with which they eat fish, are most admirably carved."

I exhibit a bone arrow-head (Plate I, Fig. 1) made by North American Indians (Sioux Indians, as I was informed).^{*} This, and the examples which I quote from New Guinea, do not illustrate so much the adaptation of natural forms as the selection of an everywhere available and suitable material.

Similar requirements produce similar results, but the forms into which the stones or bones of any district naturally break will always tend to suggest the particular shapes of the implements adopted there.

Thus many of the bone implements figured by D'Albertis¹ from New Guinea and the adjoining islands are very like those which I exhibit from people far removed in age and place, though it will be hardly suggested that the fashion was introduced into the British Isles from New Guinea or *vice versa*.

¹ *New Guinea: What I did and what I saw*, Lond., 1890, I, 50, 416, 417.

The splint-bone of a horse (Plate I, Fig. 2) I found in use in a farmhouse in Wales for making button holes.

Apple scoops made out of the radius or tibia of a sheep (Plate I, Figs. 3 and 4) have been in common use down to quite recent years.

Bone skewers and pins (Plate I, Fig. 5) have been turned out here and there with mediæval pottery in Cambridge. One specimen is made out of the bone of a bird merely whittled at one end into a pen-shaped point (Plate I, Fig. 6). Some of the others are cut out of large solid bones that do not suggest this form, and similar objects were dug up at Haslingfield with Saxon remains; *e.g.* Plate I, Fig. 7, which is a very rudely chipped bone, while Plate I, Fig. 9, appears to have been a kind of shuttle or bodkin.

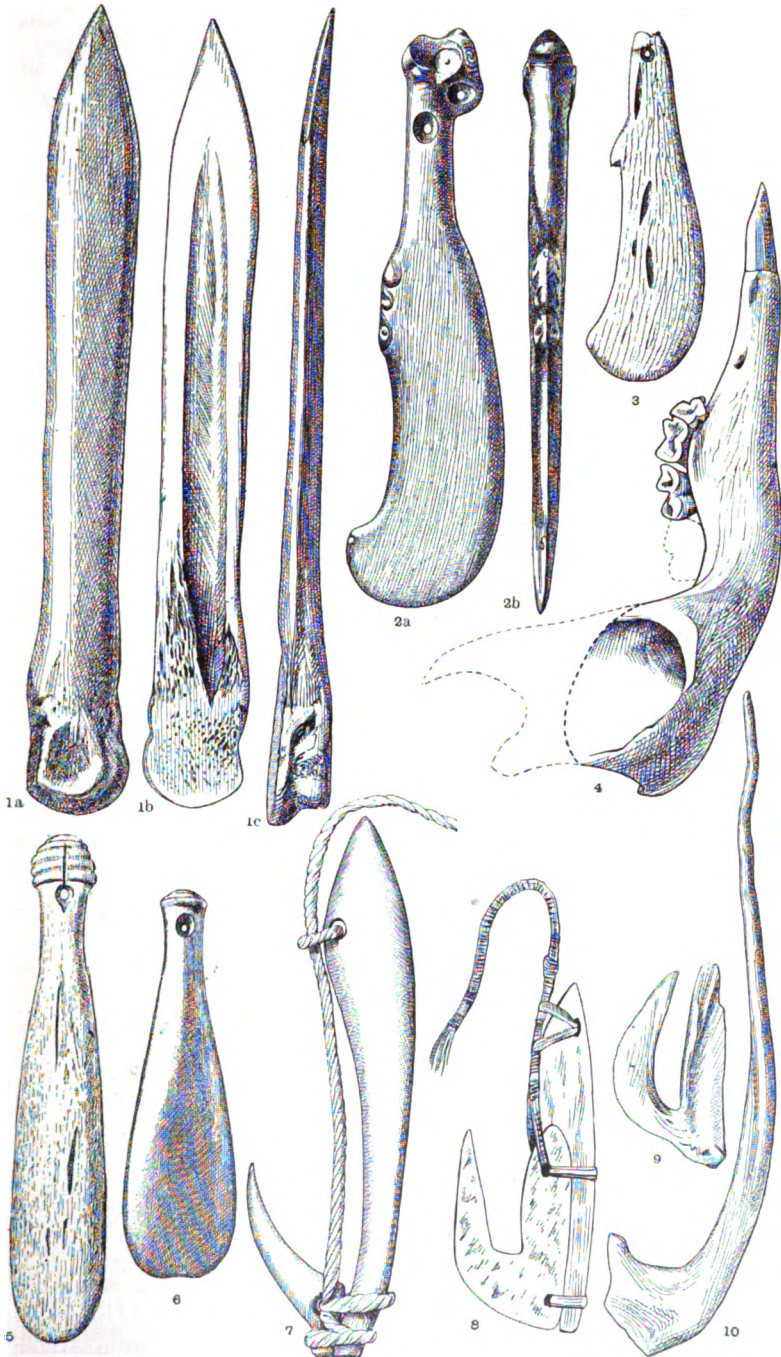
The pointed bone shown in Plate I, Fig. 8, I found in the refuse of the Roman potters' field at Horningsea, and it is not improbable that it may have been used for making the incised ornamentation on the pottery.

A slice of a hollow limb-bone makes an admirable instrument for many purposes. The "flayers" made from the radius or tibia of a small ox or deer (Plate I, Figs. 10, 10A; Plate II, Figs. 1A, 1B, 1C) are not uncommon in the Fens.

All of these are adapted with very slight modifications from the original form.

I need not multiply examples to prove that the bones found lying about on the surface of the ground or washed up on the shore were commonly used if of suitable forms or easily modified and adapted, and, when the demand for any form exceeded the supply, were reproduced in other material.

The rough hooks used for fishing by many races in a rude state of civilisation hardly seem the best that even they might have been expected to devise. But if we examine some of these more carefully, such, for instance, as those made by some of the South Sea Islanders of common shell (Plate II, Fig. 7) or of turtle shell (Plate II, Fig. 8), and compare them with certain bones in the head of our commonest fish, such as cod and haddock (Plate II, Figs. 9 and 10), we cannot fail to be struck by the resemblance between them.



It is in this connection that we have our attention specially called to those characteristics of all people in a primitive state to which I have referred, namely, their great imitative capacity and their tenacity in copying details even when they are unimportant or unfavourable.

Such features are sometimes seen among the works of art belonging to much higher civilisation, as when we find the structures which were necessary in wooden architecture imitated in stone; but in the simpler handiwork of ruder races they are much more common and strongly marked.

Now if we take the commonest weapons of the South Pacific, namely, the oval *patoo-patoo*, the bill-shaped *patoo-patoo*, the battle-axe or *bâton de commandement*, the axe for hurling, and the boomerang, we shall find that every one of them is either commonly made of the bones of cetacea or, by its form and the unnecessary reproduction of marks and protuberances, suggests that it was derived from such bones.

In different districts or countries a suggestion originating in one and borrowed by the other is often modified in the direction of the natural forms which offer the best substitute for the original material should it prove scarce or altogether wanting in the new locality. The oval *patoo-patoo* (Plate II, Figs. 5 and 6), and the bill or jaw-shaped implement (Plate II, Figs. 2A, 2B, and 3) seem to be cases in point.

It may as well be pointed out at once that there is no idea of urging that all these forms, no matter how much modified they may be or how far apart they may occur, must be traced to any one of the places where they are now found. All that is suggested is that they have a common origin in natural objects; that those which most resemble the bones of marine animals were probably first made by some people who lived near the coast, while others, like the jaw-bone of the ass in Samson's hand, were seized upon to meet the necessities of the time by dwellers inland. The cetacea are so widely distributed that there is no difficulty in accounting for the use of their bones in the South Pacific, while the former dispersal and separation of races will easily explain

the occurrence of forms, originally derived from them, among people since far removed from the sea.

The following extract from the *New Zealand Herald*, Monthly Summary, October 30th, 1896, records an example of a war club made from the jaw of a sperm whale. The *hoeroa* mentioned towards the end of the passage was of course made, not of what we should now understand by whalebone—that is, the elastic substance we obtain from inside the mouth of a right whale—but of a piece of the bone of a whale. The sperm whale has no whalebone in its mouth.

“Before his departure from the parliamentary arena, Mr. Thomas Mackenzie, M.H.R., was the recipient of a somewhat valuable and unique present from the Hon. Mr. Carroll. It was in the shape of a famous war club, made from the jaw of a sperm whale. The club is known as a *Kiatate*, or liver cutter, and was called Wharepakau, after an ancestor of Rewi Rangimio of the Ngatimaniwa, a sub-tribe of the Urewera. It was presented to Mr. Carroll by Te Tuhi at Ahikereru on March 6th, 1896. Major Mair, one of the best authorities on Maori weapons, writing about the club, mentions that when he first met the Urewera natives in 1865 this weapon was in the custody of Rewi Rangimio, who informed him that it belonged to a former ancestor (Wharepakau) over ten generations ago, and that it was greatly valued by the tribe, who traced the ownership from father to son for ten generations. The names of the previous owners are duly chronicled. It was Wharepakau, in connection with his brother-in-law Tangiharuru, who attacked and destroyed the once powerful tribe called Te Marangaranga, an ancient people who occupied the country about Galatea. Wharepakau came to his death at Tawhinau, near Galatea, in this manner:—He was startled by seeing a moa, which so alarmed him that he fell over a cliff, and the point of his *hoeroa*, a whalebone weapon which he carried, entered his side and caused his death. The place where he fell is still called *Te rere o Wharepakau* (‘The Leap of Wharepakau’). Wharepakau means ‘winged house.’”

THE PATOO-PATOO.

The oval *patoo-patoo* or *mere* (Plate II, Figs. 5 and 6), is made of bone, wood, or stone, ground into a long flat form such as would be readily suggested by the water-worn fragments picked up on the shore.

One of the specimens (Fig. 5) in Captain Cook's collection in the Library of Trinity College, Cambridge, is part of the jaw of a cetacean worked into a flat, elongate, oval implement with a handle terminated in a transversely grooved knob to prevent it from slipping through the hand and further secured by a hole bored through it to receive a thong. This specimen does not show any trace of the original form of the jaw out of which it may safely be inferred to have been fashioned from the texture of the bone and the foramina. Fig. 6 represents an implement in jadeite from the same collection, obviously made upon the same lines, although there was nothing in the stone to suggest the shape. A similar implement is found in wood.

It may be that the original of these was a water-worn shoulder-blade, the proximal expansion suggesting the handle.

Some of these implements may have been suggested by the jaw-bone of some smaller animal than a whale, in which case the form of the jaw may be expected to be retained.

Now among the specimens brought by Captain Cook from New Zealand and preserved in the Library of Trinity College there is one made of green jade, the side aspect of which (Plate II, Figs. 2A, 2B) reminds one strongly of a jaw in which three tooth-sockets remain, while the rest of the alveolar has been cut away.

When, however, we look down upon the supposed teeth (Fig. 2B), we find that instead of the three sockets we have the head and part of the body of a grotesque figure. This is in stone, so that there is no suggestion of there being any part of the actual teeth or of teeth-sockets remaining, but in the bone specimen (Fig. 3), which is actually part of a jaw, we see the origin of the suggestion. Other points of resemblance will be apparent on comparing

Fig. 2A with Fig. 4, which represents the jaw of a kangaroo, the dotted line cutting off the thin articulating processes as they would be by being knocked about on the shore.

The jaw-shaped *patoo-patoo* brought by Captain Cook from New Zealand may be derived from the jaw of one of the marsupials so characteristic of Australasia, or it may easily have been brought from countries where the larger mammals are common; for we must remember the traditions of the natives—the Maoris, for instance—that they migrated from other lands some centuries back.

THE BATTLE-AXE.

A long flat rib would make a very effective implement, and with little work might be shaped into a weapon like the wooden sword shown in Plate III, Figs. 1A, 1B.

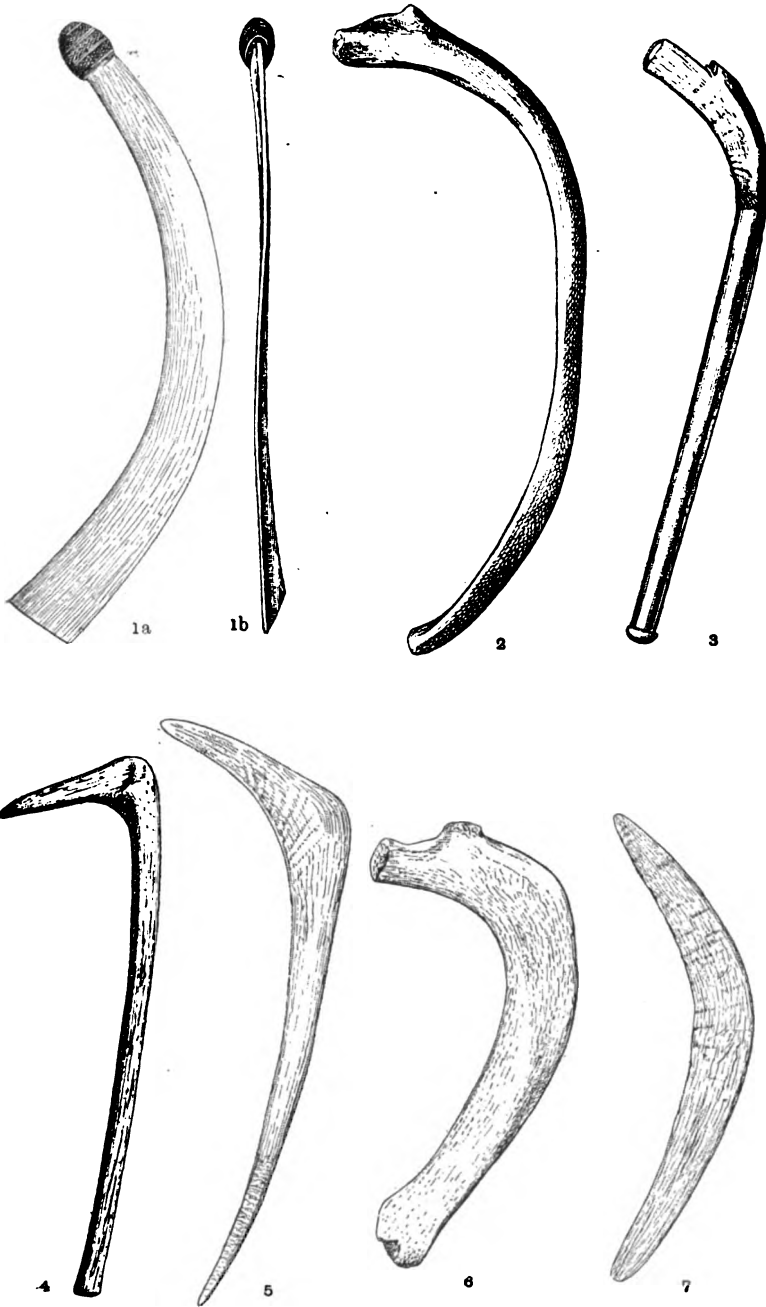
Mr. S. J. Freeman informs me that he saw a bone weapon like a large cavalry sword from 3 to 4 feet long in one of the camps of the natives at Corva Corva on the North Cape of New Zealand in 1878.

The rib of a cetacean (Plate III, Fig. 2) obviously suggested the common form of Fijian battle-axe or *bâton de commandement* (Plate III, Fig. 3). The transverse process which rises from the upper side of the proximal end gives it somewhat the outline of an animal's head, while the small interlocking protuberance on the side suggests the eye, just as the hole for the hawser is commonly represented near the figure head of many a vessel, in which the hawser no longer passes through it but is attached differently from the original method.

Although the implements are made of wood, these very marked but unnecessary features are generally reproduced.

HURLING THE BATTLE-AXE.

In some of the balænoptera which are or were frequently seen round Australia and New Zealand the proximal end of the ribs which occur near the front part of the animal is prolonged below the vertebral



column into a long flat pointed process as represented in Plate III, Fig. 4.

The Australians have a wooden implement closely resembling this bone. The head is flat and pointed (Plate III, Fig. 5), and the end which is grasped is rounded and straightened for convenience of handling.

Such weapons are widely distributed. Owing to its flattened end and thin edge the missile offers less resistance to the air, and when it is made to rotate gains steadiness of flight as does a quoit. Discoidal and falcate implements of this class are known from India. Weapons of this form, intended to be thrown, were employed among all races. Even the battle-axe of Northern Europe was not only used, as is a cavalry sword, for cutting down the enemy at close quarters, but was sometimes hurled at him. The Rev. Edward Conybeare has kindly sent me the following references in support of this :—Procopius¹ (A.D. 539) tells how “the Franks marched into Italy to the number of 100,000 men. A few horsemen armed with spears surrounded the king. All the rest fought on foot, having neither bow nor spear, but each with a sword and shield and one axe. The iron of this axe is stout, sharp and two-edged ; the handle, of wood, is exceedingly short. At a given signal they all throw these axes, and thus break the shields of the enemy and slay his men.” Next year the Franks sent a threatening message to Belisarius that a reinforcement of 500,000 was on its way across the Alps “whose axes flying through the air will bury the Roman army in one heap of ruin.” Procopius was himself engaged in this campaign and forcibly describes how the Goths (who thought the Franks were come to aid them, and came out to greet them) were met by “a storm of flying axes.”

What more natural than that a native of the South Pacific Islands should pick up the axe-like rib of a cetacean which he found upon the shore and use it as a battle-axe at close quarters or a throwing weapon, especially in the case of the middle ribs, whose flattened ends adapted them admirably for this purpose?

¹ *Anecdota*.

THE BOOMERANG.

The boomerang is a very curious implement, and we cannot suppose that savages calculated out and manufactured an instrument which should be so nearly flat and in one plane as to fly rotating in that plane, and which, further, should be chamfered off like two vanes of a windmill, so that, when the force of propulsion was dying out, the rotation should carry the instrument up into a higher position, from which it should glide down an air-incline to the place from which it started, or to some other place at the will of the thrower.¹ It might be inferred that, since they could not have elaborated such a complicated machine, they must have obtained it from some other people of higher civilisation, or be themselves the degenerate descendants of such a race.

But these difficulties are got over if we can show strong presumptive evidence that the boomerang itself might well be suggested by a common and world-wide natural object, and that a simple explanation can be offered of the adoption of that peculiarity of form in which the boomerang differs from the common axe adapted for close combat or to be hurled.

SUPPOSED USE OF THE BOOMERANG IN INDIA, EGYPT, EUROPE.

It has actually been urged as corroborative evidence of a common origin for some of the black races of India and of Australia and some of the early inhabitants of Egypt that this peculiar instrument, the boomerang, the characteristic weapon of Australasia, was used in India and figured on certain ancient monuments in Egypt.

There is some doubt as to whether the object represented in Egyptian sculpture was really a boomerang or one of those weapons just described which might be used as an axe at close quarters or be hurled at the enemy. Nor is there any necessity for inferring that, whatever it was, it must have been made or even used by

¹ See Walker, A. T., *Proc. Camb. Phil. Soc., Proc. R. Soc.*, Vol. LXI, No. 378, p. 239, "On Boomerangs."

the highly civilised Egyptians themselves, but only that it was in use at the time of the record by some race with which the Egyptians came in contact or perhaps even employed. At the beginning of this century there were, among the Russian troops, soldiers fighting with bows and arrows against the French.

It has been supposed by some that the *cateia* of Virgil was a boomerang—

“Teutonico ritu soliti torquere cateias.”¹

This was a foreign weapon of some kind which Virgil speaks of as Teutonic, a name then applied to the people of Northern Europe whether of Celtic or Teutonic origin. Isidorus calls it Gallic—

“Cateia est genus Gallici teli . . . quod si ab artifice mittatur, rursus venit ad eum qui misit.”²

That the Gauls used it as a weapon of war is suggested by Bezzenberger.³

According to Servius the *cateia* was like the *aclis*, or *aclys*, of which Virgil says—

Oscorumque manus : teretes sunt aclides illis
Tela, sed haec lento mos est aptare flagello.⁴

That is to say, they were thrown with a thong fastened on to a handle so as to resemble a small whip, and these thongs were known as *amenta*—

“Quibus ut mitti possint, vinciuntur jacula.”

It was

“Genus antiqui jaculi exigui et teretis, quod flagello seu loro longissime jaciebatur.”⁵

This was simply to give the thrower more leverage and to enable him to send it farther.

Some, however, forgetful of the form of the weapon, and not bearing in mind this method of hurling a javelin with the *amentum*, misunderstood the use of the thong, and saw in it merely a string attached to the missile, then, speculating upon its use, suggested that it was for pulling the weapon back to the thrower.

“Aclides tela sunt quæ fune religata, post inflictum vulnus retrahuntur.”

¹ *Æneid*, VII, 741.

² *Orig.*, XVIII-VII, 7.

³ *Beiträge*, XXI, 124.

⁴ *Æneid*, VII, 730.

⁵ *Facciolati*, references *sub voce*.

Servius says—

“Catejam quidem asserunt teli genus esse tale, quales acclides sunt, ex materia quam maxime lenta, cubitus longitudine, tota fere clavis ferreis illigata, quam in hostem jaculantes, lineis, quibus eam adnexuerant, reciprocum faciebant.”

Salmas, accepting this explanation, says, “*Ita fuisse loro illigatas, ut peracto vulnere ad jacentis manum redirent.*” Isidorus, however, says nothing about its having a string attached to it by which it could be pulled back, and describes it as a weapon “*quod si ab artifice mittatur, rursum venit ad eum qui misit,*” or, as Conington puts it, “he supposes that it returned of itself to the thrower like an Australian boomerang.”

Thus Virgil’s whip-like *amentum*, or thong with a handle, grew into a string so long that with it the missile could be drawn back. Then the thong was lost sight of altogether, and it was said that this weapon if skilfully thrown would return to the thrower, that in fact it was a boomerang.

It may be that the traditional descriptions of two different weapons may have got mixed up: the one a javelin with a smooth round shaft, “*tereti mucrone,*” and thrown to a great distance with a thong, “*quod flagello seu loro longissime jaciebatur*”; the other a battle-axe studded with nails, “*clavis sit ferreis invicem religata,*” and never flying very far, but crushing through every obstacle against which it struck.

“*Quæ jacta quidem non longe propter gravitatem evolat, sed, quo pervenit, vi nimia perfringit.*”

It is clear that this was not the same thing as the javelin, of which each soldier carried two or more, “*earum binas saltem aut plures etiam ferebant milites in proelio,*” for each soldier could not carry a bundle of heavy battle-axes or clubs into the field.

Mr. Whitley Stokes informs me that he heard Hofrath Bühler say that he had himself “seen a tribe of Bhils in Central India using the boomerang. They employed it not in war, but (as well as I remember) for killing wild ducks. The weapon was a true boomerang which returned to the thrower.”

Whether or not the Indian wooden axe, adapted for hurling, had always the twist of a boomerang is not quite

clear. But if it ever had there is no reason why it should not have been the common property of the Negrito or other perhaps earlier race, and have originated anywhere along the coast of the Indian Ocean such as that ocean was when the people who first used the boomerang, and whose traces are seen in Australasia, in the Deccan, and in Egypt, travelled along its shore.

ORIGIN OF BOOMERANG.

If this be so it is improbable that the boomerang was the result of calculation and therefore the product of a very advanced civilisation. We must rather look for its origin in some common natural object, and seek a simple explanation of the adoption of that peculiarity of form by which the boomerang differs from the common battle-axe.

The front ribs of the cetacea generally differ much from all the others, and this difference is more marked in some species than in others.

They are flattened and almost equally broad along their whole length (Plate III, Fig. 6), and moreover the plane in which the bone lies is at right angles to the length of the animal's body, so that there is a tendency at the distal end to bend back to the normal position of the other ribs and lie parallel to the barrel, which, with the usual chamfering off at the proximal end, where there is an adaptation for overlap, gives the bone the form of two adjoining vanes of a windmill. This would produce no appreciable effect on the flight of such a heavy object as a cetacean rib-bone, and would be rather a disadvantage to it as a throwing weapon.

When, however, the bone weapons were reproduced in wood (Plate III, Fig. 7), and the form was closely imitated, these two vanes by their rotation would carry the light wood up to a higher level and let it glide back along an inclined air-plane to the thrower. The discovery would thus be made by accident.

I am informed by Mr. Walker, who has made the subject of boomerangs a special study, that it is only a small proportion of them that have the twist requisite to

make them describe a curved path or return to the point from which they were thrown.

As the ribs vary in different species of cetacea and also at different parts of the same animal, there is, as might be expected, much variety in the forms of weapon derived from them; but they pass gradually from one form to another through intermediate ribs, and so we find a similar series among the weapons, as has been shown by General Pitt-Rivers.¹ This suggested their being derived one from the other, as probably many were.

SUMMARY.

1. Bone is a commonly available material everywhere, and the forms of bones have suggested the shapes of the instruments independently in many and far distant countries.

2. The four characteristic weapons or implements of Australasia, namely, the *patoo-patoo*, the battle-axe, the hurled axe, and the boomerang, find their exact counterpart in the bones of cetacea which are thrown upon those very shores, which is too large a number to be referred to mere coincidence, especially seeing that two out of the four have been found made of cetacean bones as well as of wood or stone.

In the cetacean ribs there is not only a simple explanation of the shape of the *head* of the battle-axe, which has something of the profile of a wild swan's head, but also of the *form of the blades* of the boomerang, for some of the cetacean ribs have a twist in them due to the gradual change from the position of the front ribs, which are flattened in planes at right angles to the length of the animal's body, to the position of ribs which lie flat on the "barrel."

The heavy bone would probably never show the effect of the rotatory motion upon the two blades though they were inclined like the vanes in a windmill, but when it was imitated in lighter material by the savage, who

¹ *Journ. R. United Service Inst.*, Vol. XII, 1868, No. LI, p. 399, "Primitive Warfare, Section II: On the re-

semblance of the weapons of early races; their variations, continuity, and development of form."

copied essential or unessential characters, the form would at length be noticed and being found of advantage would be carefully reproduced.

Cetacea, such as the grampus, are of world-wide distribution, and the Ca'ing whale occurs round the shores of Australia, where the true rotating boomerang is most common.

The jaw of a kangaroo, or of some mammal carried by the natives from other lands, would explain the peculiar bill shape of some of the implements.

CURRENT ARCHÆOLOGY.

SILCHESTER. EXCAVATIONS DURING THE YEAR 1900.

The work of the past season, carried out by Mr. Mill Stephenson and Mr. Hope, comprised the examination of four *Insulae* at the northern end of the area enclosed by the city walls, being Nos. 23 to 26 on the plan published by the Excavation Committee. The results were of great, and in one case, to be referred to later, of exceptional interest.

Insula 23 was first dealt with. It is a square of 394 feet, being thus considerably above the average size. But in spite of this it contained only two buildings of importance, with traces of a number of small structures in its northern portion. House No. 1, at the south-west corner, had been previously uncovered by the Rev. J. G. Joyce in 1865 and described by him, but several new points were brought to light during its re-examination. It is of the courtyard type, with the main chambers on the north and east, a corridor and entrance vestibule on the south, and the entrance to the courtyard on the west. It contained a large number of mosaic floors, mostly of simple character and without pattern. The entrance vestibule, however, had a floor of an unusual kind, probably unexampled in England outside Silchester, showing a combination of the two systems of paving, *opus sectile* and *opus tessellatum*. House No. 2, also of the courtyard type, is irregularly placed with regard to the lines of the streets, and shows by its plan that it has undergone a series of additions and alterations. Originally it was probably of the corridor type, and consisted of the western range only, but was converted to its present form by the addition of north and east wings. In one of the larger rooms was a mosaic floor with a geometrical centre of black and white fret and knot work, within a vandyked border of red and drab *tesserae*, all set in a red ground. Another room, with a pillared hypocaust under its eastern end, had a floor of red mosaic, enclosing a panel with a

border of braidwork and four compartments, one of which was destroyed; the others contained respectively a floral pattern, a vase, and a dolphin, on a ground of white chalk *tesserae*, which had almost entirely perished. Immediately to the south of this house was a small rectangular building standing east and west, 18 feet by 17 feet externally, with a porch-like projection on its eastern side built with a straight joint against the main structure, and clearly an addition to it. A chase for the plates of a wooden floor existed on three sides of the rectangle, which from other indications may have been a small temple or *œdícula* with two columns *in antis* on its eastern side. Wooden floors are exceedingly rare but not unknown in the buildings at Silchester. Foundations of a smaller and earlier rectangular building were discovered within the walls just described, having a different axis to them, but further excavation threw no light on its history. A first brass of Marcus Aurelius was found at the floor level of the earlier building. *Insula* 24, a long triangular area bounded on the north by the city wall, contained two houses, both close to the wall. House No. 1, of the corridor type, stood east and west, and was entered from the street by a short corridor and a vestibule. A number of square rooms with intermediate passages opening on to a corridor on the south side formed the body of the house and were chiefly remarkable from the complete absence of any remains of flooring, although the back walls were standing to a greater height than is usual at Silchester. Traces of both earlier and later buildings were found on the site. House No. 2 showed a remarkable plan, not paralleled by anything as yet found. Roughly speaking it was of the courtyard type, with the courtyard bisected by an entrance gallery. In the entrance vestibule was a pavement similar to that described in House 1, *Insula* 23, as a combination of the two systems of paving, and unexampled outside Silchester. The main body of the house consisted of a row of chambers and passages having corridors on either side, the southern being the principal and the northern probably a pentise only. The central group of chambers were planned with an eye to effect, at the end of the long gallery leading from the street. A vestibule with a

wide opening towards the gallery opened with a doorway in each of the three other sides into three rooms, two of which showed traces of fine mosaic panels in the centre of the floor, and the third gave another possible instance of that very rare feature, a wooden floor. Several other rooms in this house had floors partly of white and partly of red *tesserae*, so arranged as to suggest that the position of seats or pieces of furniture had dictated their plan. White chalk *tesserae* were extensively used in this house, which was remarkable not only for the large number of rooms with mosaic floors, but also for the traces of painted plaster from the walls of the winter rooms, and perhaps elsewhere. Brilliant red panels with purple borders seem to have covered the walls, while other fragments showed grounds of gold, blue, and green. Other specimens of plaster of a drab colour were met with, combed in various directions, apparently as a decoration, and not a key for a thinner surface coat. *Insula* 25, of small extent, and triangular in shape, forming the extreme north-west part of the area within the walls, contained remains of two buildings of minor importance, one of them having been probably used for dye works. *Insula* 26, south of the preceding, 395 feet east to west by 269 feet north to south, produced several interesting details, notably a circular foundation, 27 feet in diameter, of flint rubble with a floor of *opus signinum*. All round its vertical edge was a cutting in the gravel as if for the foundations of a timber construction enclosing the circle. A small segment on the east was cut off and the straight edge faced with tile. The use of this building is unknown. It was abandoned at an early date, for the foundations of a later building are driven through it and a pit sunk in it. Remains of three houses were found in this *Insula*, only one, No. 3, being of any size. No. 2 is exceedingly fragmentary and is chiefly of interest as being an additional proof that the many vacant sites in Silchester were not necessarily always in that condition, some buildings, evidently once considerable, having been so thoroughly destroyed that their very existence might be disputed, were it not for the evidence of similar houses in a slightly better state of preservation. House No. 3 was partly uncovered in 1866, and consisted of western and

southern ranges with corridors, and an added vestibule forming an entrance from the street.

Three wells were found during the season, two in *Insula* 23 and one in 26, all having timber framing towards the bottom. Of those in *Insula* 23, the first, 27 feet deep, contained a most interesting bronze bucket beaten up out of a single sheet of metal, 10 inches across and $7\frac{1}{2}$ inches deep, having originally had an iron handle. It was much patched and mended, and had evidently been in use a long time. The second well, $21\frac{1}{2}$ feet deep, yielded the most important find of the year, being a collection of iron tools, over 100 in number, forming a mass 7 feet thick, resting on 5 feet of black ash, and completely filling up the lower part of the well. After much careful and patient work in separating the mass, the collection was found to consist of a set of smith's tools and a number of articles forming his stock-in-trade. The tools include two striking hammers, ten small hammers, two pairs of tongs, two sates, a drift, a small chisel, a pair of wringers or hand levers, two pairs of dividers, and two instruments for making nails. Of tools belonging to different trades, there are an axe-head, three socketed chisels, an adze, and a centrebit; a shoemaker's hobbing-foot or anvil; three plough-coulters, a cotter, two forks, and eight mower's anvils, two being unfinished. Among the miscellaneous objects are knives and choppers, bucket-handles, shoes for staves, two files, two saws, a spear-head, a pocket knife, part of the binding of a large door $3\frac{1}{2}$ inches thick, a very large padlock of well known type, $20\frac{3}{4}$ inches long, and part of another, with pieces of chain, four copper cooking pans, a bronze steelyard weight in the form of a bust, now hollow, and a pottery jug and bowl. Perhaps the most important object is an iron instrument identified as a farrier's buttress, of which several examples have been found in France, and one from Pompeii is in the Naples Museum.

A large number of pits were found and excavated, producing a series of antiquities comprising glass, coins, beads, brooches, keys, rings, etc. and in this connection it is to be noted that the yield of complete pottery vessels, about 130 in number, is greatly in excess of other years' records.

The results of the season's work have been, as usual, exhibited at the rooms of the Society of Antiquaries.

The systematic excavation of Silchester has now been carried on for eleven seasons, and 73 acres out of the 100 within the walls have been examined, so that the completion of the work may fairly be said to be in view. The results, as evidenced by the Reading Museum and the published descriptions from year to year, speak for themselves, and the work, the largest and most important of its kind as yet undertaken in England, should command the support of every archæologist. Subscriptions may be sent to the Hon. Treasurer, F. G. Hilton Price, Esq., 17, Collingham Gardens, S. Kensington, or to the Hon. Secretary, W. H. St. John Hope, Esq., Burlington House, W.

EXCAVATIONS AT WAVERLEY ABBEY, SURREY, IN 1900.

The excavations at Waverley Abbey were continued last summer by the Surrey Archæological Society, under the direction of the Rev. T. S. Cooper, M.A., F.S.A. The results were even more important and satisfactory than hitherto, although at times the work has been very perplexing, owing to the many unexpected walls and footings of the Norman abbey found mixed up with, and sometimes made use of in, the later buildings. In the previous year Mr. Harold Brakspear, F.S.A., who has brought his large experience to bear on doubtful and difficult points, discovered the little presbytery of the Norman church in and forming part of the south transept of the later magnificent church planned by William de Bradewater. The long, narrow Norman nave has now been traced below the cloister. The original cloister was at some time considerably enlarged and carried across the *cellarium* as well as the nave of the first church. The arrangement of the frater and its pulpit is interesting, as it shows the former to be of two dates at least. The plan of the infirmary hall and kitchen is now clear, and it has become evident that there was no building between this portion of the abbey and the river. Some interesting features have come to light in the direction of the monks' dormitory. Much of the

Norman work here remains, with the south wall on a line with that of the frater; later the dormitory was extended southwards at a higher level almost to the river bank. At the north end, the doorway leading from the cloister and the five broad steps ascending to the dormitory have been exposed, and close by a winding staircase, which probably formed the approach to the treasury. The plan of Bradewater's church also is now nearly complete. There is still a good deal to be done west of the *cellarium*, where the guest houses, the infirmary of the *conversi*, and possibly a gateway may be looked for. This is of almost greater importance than the work already done, since these buildings of the outer court have never been worked out properly anywhere. Both at Fountains and Furness the remains of them are anything but complete, and at the former it is known there were a number of buildings of which no trace can be found. In order that the opportunity may not be lost of adding materially to what is already known of a Cistercian abbey, it is hoped that the owner of the site will consent to the excavations being extended, and, in this event, that sufficient funds, which are at present urgently needed, may be subscribed to enable Mr. Cooper to carry to a satisfactory conclusion this most important work.

PAINTINGS IN HARDHAM CHURCH.

Mr. P. M. Johnston sends the following notes on his paper printed at p. 62 of Vol. LVIII of the *Journal* :—

A later inspection of the paintings suggests the following *addenda et corrigenda*.

The subject of the painting on the northern half of the east side of the chancel arch is probably "ADAM AND EVE AFTER THE EXPULSION." Adam is seen wrestling with gnarled branches of a tree in allusion to the text, "Thorns also and thistles shall it bring forth to thee" (Gen. iii, 18); while, below, Eve is milking a very weird-looking cow.

On the southern side of the same arch, below the subject of "THE FALL," shown in the coloured plate, are the remains of another, evidently illustrating the text, "And the eyes of them both were opened, and they

knew that they were naked" (Gen. iii). Adam and Eve are depicted nude and with outstretched hands, in an attitude suggestive of shame and confusion. They stand against a yellow-diapered background, with a pink border on which is a larger diaper pattern.

In the painting of the Twenty-four Elders on the north side of the chancel they are shown with vials shaped like slender glass water-bottles, while on the opposite wall the vials are similar to the glass in an hour-glass. Their crowns are square in shape, like the carpenter's paper cap.

Underneath on the south wall is part of a series of paintings representing the Resurrection. One can distinguish the three Maries bringing spices to the tomb, on which is seated an angel, nimbed, with outstretched wings.

I can now clearly make out a figure crucified or bound to the wheel on the north wall of the nave; and there can be no doubt that this represents a scene in the martyrdom of St. George.

I think it right to add that, on a further close inspection, it appears more probable that the subject over the chancel arch, west face, was not, as shown on the plate, "The Adoration of the Lamb," but "The Veneration of the Cross." The object of the angels' worship, within the circle over the crown of the arch, whatever it was, has been almost entirely obliterated, but such traces as remain are more consistent with the figure of the Cross than with that of the Agnus Dei shown on my drawing.

CANTERBURY. ST. AUGUSTINE'S ABBEY AND ST. PANCRAS' CHURCH.

This site, which was last year rescued from the desecrated condition which has so long vexed the souls of antiquaries, is now in the possession of trustees, appointed to superintend a thorough examination of all the remains of building within its area, comprising the eastern part of the abbey church, with the eastern range of the conventual buildings and the infirmary, and the northern and eastern parts of the early church of

St. Pancras, the remaining portions of which have been cleared and planned some years ago.

Work was begun early in November under the superintendence of Mr. W. H. St. John Hope and Canon Routledge, and in view of the lateness of the season, it was thought better to complete the excavation of the church of St. Pancras, leaving the systematic clearing of the abbey buildings till the next season. A certain amount of digging was, however, carried out on the site of the abbey church, resulting in the discovery of part of a twelfth century apsidal chapel on the east of the north transept, and a few other details.

The results of the first season are of considerable importance. The plan of St. Pancras' Church is definitely ascertained, and shows that the eastern apse was elliptical, like that of the early church of Rochester, and not a semicircle, as had been conjectured. The site of the arcade between the nave and the presbytery has been cleared, and in the process a part of the arch which spanned the central opening has been found, lying as it fell on the floor of the church, and owing its preservation to the fact that it was worked into the foundations of the cottage which was built on the ruins of the church after the suppression, and is shown in Hollar's view of St. Augustine's Abbey of 1656.

The northern *porticus* of the nave has been completely destroyed, but clear evidence of the abutment of its walls remains.

But the most important result of the work, from the view of the history of the building, has come from an examination of the remains of the walling now fully exposed. The nave walls are built with a yellowish mortar, the southern and western *porticus* with a white mortar, and the lower parts of their walls are not bonded to those of the nave. But from the evidence of fallen masses of masonry from the upper part of the nave walls, it appears that only the eastern wall was carried to its full height in the yellow mortar, and that the western wall was not built up to a height of more than 3 feet in it; and further, some fragments of masonry, undoubtedly from the north and south walls of the nave, are set in the white mortar,

showing that the use of the yellow ceased before they reached their full height. The relation of the two periods of building is settled by the junction of the north wall of the west *porticus*, which remains to a height of over 11 feet, with the west wall of the nave. The straight joint between the two walls ceases at about 3 feet from the ground, and above that level they are bonded together and both built in white mortar, which overlies the yellow mortar of the lower part of the nave walls. It seems, therefore, that a very little time elapsed between the first and second periods of building, and that the *porticus*, though not of the first season's work, were in all probability parts of the original design.

Outside the lines of the nave a good deal of fallen masonry remains to be examined for traces of window openings or other features, and it is hoped that the present year's work will be successful in this respect.

Owing to the depth of soil overlying the eastern parts of the abbey church, the process of clearing will be slow, but if the results are at all commensurate with the importance of the site, which is that not only of St. Augustine's Shrine, but also of his own church of St. Peter and St. Paul, and of Eanbald's church of St. Mary, these excavations will make additions, the value of which can hardly be overestimated, to our knowledge of the earliest times of the reintroduction of Christianity to southern England.

Proceedings at Ordinary Meetings of the Royal Archaeological Institute.

April 3rd, 1901.

Judge BAYLIS, K.C., Vice-President, in the Chair.

Mr. O. M. DALTON, F.S.A., read a paper on "The *Fondi d'Oro*, or Gilded Glass of the Catacombs," which will be printed in the *Journal*. The paper was illustrated by drawings and photographs, and by the kind permission of the director of the Victoria and Albert Museum several pieces of Italian work of the fourteenth century were shown, and a fine modern Venetian reproduction was kindly lent for exhibition by Mr. C. H. Read, F.S.A.

Mr. W. H. St. JOHN HOPE read a paper on "The Gilbertino Priory of Watton, in the East Riding of Yorkshire," exhibiting a coloured and dated plan of all the remains of buildings as yet found on the site. The paper is printed at p. 1.

Miss ROSE GRAHAM contributed some remarks from documentary evidence collected by herself. In connection with the building of the canons' cloister, *circa* 1320, she said that in 1330 the prior owed £100 to the Archbishop of York, which might have been money borrowed for the expenses of building. *Conversi* ceased to exist at Watton as early as the thirteenth century, as all outside work was done by paid servants before the end of the century. There was a good deal of evidence of the troubles of the house, which was robbed by the purveyors of Edward II., on his Scotch expedition, and by the family of De Moleys, who apparently had a quarrel with the prior. In 1326 was a record that fifty-three nuns took the veil in that year. From the plan of the building it was evident that the regulation that both fraters should be served from one kitchen was soon set aside, and confirmation of this was found in Papal bulls ordering the observance of the rule. In the last years of its existence the Priory was held *in commendam* by Richard Holgate, who did much harm to the house and its possessions, and made it most unwillingly take part in the Pilgrimage of Grace.

Mr. E. GREEN also took part in the discussion.

May 1st, 1901.

Mr. E. W. BRABROOK, C.B., F.S.A., Vice-President, in the Chair.

Mr. E. GREEN, F.S.A., read a paper by Mr. A. R. WHITEWAY on "The Pyrenean Neighbour; or, the Vicinal System in the Western Pyrenees," which is printed in the *Journal* at p. 182.

Mr. H. LONGDEN read a paper on "Cast Iron," exhibiting in illustration several fine fire-backs, dating from the beginning of the seventeenth century onwards. A specimen dated 1604 bore the arms of James I., a second, inscribed RICHARD LENARD FOUNDER AT BRED FOURNIS 1636, showed the founder standing surrounded by the implements of his trade and examples of his works. Several fire-backs with Scriptural subjects, of the middle of the seventeenth century, were

exhibited, as well as a very effective specimen with a rose and crown, dated 1650, and a north country "Fairfax" back, inscribed FAIRFAX COUNQUIROR 1649. With reference to this last, Mr. Longden noted the existence of a back having St. George and the Dragon, and inscribed CURSIUS and NIL DESPERANDUM 1650, which might be considered a sort of "counterblast" to the Fairfax device. A fine model of a foreign example of a cast iron relief, not meant for a fire-back, was exhibited, and also a rubbing of an iron grave-slab to Anne Forster, 1591, the process of casting being explained.

Mr. J. HILTON, F.S.A., exhibited a very delicate example of cast iron, being a pair of earrings of German work, originally made to replace similar articles of gold contributed to the war fund by German ladies during the Napoleonic wars.

Mr. R. GARRAWAY RICE, F.S.A., gave a list of extracts from wills of Sussex iron-founders, containing many very interesting details relating to the trade, and showing that cast iron vessels and fire-backs, etc., were considered of sufficient value to form the subjects of separate bequests.

June 5th, 1901.

Sir HENRY H. HOWORTH, K.C.I.E., President, in the Chair.

His Majesty's gracious reply to the Address presented by the President, Council, and Members of the Royal Archæological Institute was read.

Professor W. BOYD DAWKINS, F.R.S., F.S.A., read a paper on "The Exploration of a Sepulchral Cave at Gop, near Prestatyn, Flintshire," illustrating his remarks with coloured plans and sections. The paper will be printed in the *Journal*.

The PRESIDENT and Messrs. GREEN and BRABROOK took part in the discussion.

Mr. E. W. BRABROOK, C.B., F.S.A., read a paper on "Mediæval Lavatories," citing a number of monastic examples, with an illustration of the twelfth century specimen at Canterbury. Two classes of these buildings exist, the one circular or octagonal, the other rectangular in plan, the earlier examples being all of the first class. Mr. Brabrook quoted the description of the Durham lavatory from the "Rites" as showing what elaborate workmanship was expended on buildings of this kind in the great monastic houses. By past generations of antiquaries they were generally considered to be baptistries. Canterbury and Mellifont, visited by the Institute in 1900, were given as examples of the long persistence of this opinion, that at Canterbury having actually had a font put into its upper or cistern chamber in modern times in vindication of its supposed former use. The great fifteenth century lavatory at Gloucester was given as an example of the rectangular plan, which was the form usually taken by domestic lavatories, these being often of great size, so much so that "even a hundred knights and ladies" could wash in them at the same time.

The PRESIDENT and Messrs. BOYD DAWKINS, GREEN, and GARRAWAY RICE joined in the subsequent discussion.

Judge BAYLIS, K.C., at the close of the discussion, referred in suitable terms to the recent deaths of Mr. Arthur Cates and Mr. J. Park Harrison.

A List of the principal Works published under the superintendence and sanction of the Council of the Royal Archaeological Institute.

THE ARCHAEOLOGICAL JOURNAL, published under the direction of the Council of the Archaeological Institute. Vols. I. to V. 8vo. 2l., cloth boards; Messrs. PARKER, Oxford and London.

Vols. VI. to XXV. (inclusive) may be obtained at the Office of the Institute, or through any Bookseller, price (*in parts*) 12s. 6d. a volume; price to Members, 4l. for the series in question (*in parts*), or at the rate of 4s. a volume, in portions of not less than five volumes. Later volumes, 7s. 6d. a part, or 1l. 10s. a volume; price to Members, 2s. 6d. a part or 10s. a volume; last three volumes published, price to Members, 5s. 6d. a part or 15s. 6d. a volume.

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THE WINCHESTER VOLUME: Memoirs communicated at the Meeting in 1845 (*out of print*).

THE YORK VOLUME: Memoirs communicated at the Meeting in 1846. Price 1l. 1s.; to Members, 15s.; very few copies remain.

THE NORWICH VOLUME: Memoirs communicated at the Meeting in 1847. Price 10s.; to Members, 5s.

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THE NEWCASTLE VOLUME: Memoirs communicated at the Meeting in 1852 (*out of print*).

THE CHICHESTER VOLUME: Report of the Proceedings of the Institute at the Chichester Meeting in 1853, with catalogue of the Museum (*out of print*).

CATALOGUE OF LIBRARY OF THE ARCHAEOLOGICAL INSTITUTE, price 10s.; to Members, 5s.

Catalogue of the Museum of Antiquities and Works of Art formed at the York Meeting in 1846. 8vo. (*out of print*).

Catalogue of the Museum of Antiquities and Works of Art formed at the Edinburgh Meeting in 1856 (*out of print*).

MAP AND MEMOIR OF THE WATLING STREET, the Roman way across Durham and Northumberland, with plans of Stations and Camps; from a Survey made, by direction of the Duke of Northumberland, by Mr. MACLAUCHLAN, on the occasion of the Meeting of the Institute at Newcastle, 1852. Folio. Price 12s. 6d.; to Members, 9s. 6d. (*out of print*).

The Survey of the Watling Street may be obtained by Members with the SURVEY OF THE ROMAN WALL, made by direction of the Duke of Northumberland, by Mr. MACLAUCHLAN. Price of the Surveys, in cloth, folio, with two Memoirs, 8vo., 4l. 4s. (*not published*); very few copies remain.

MAP OF BRITISH AND ROMAN YORKSHIRE: Compiled by Sir C. NEWTON, K.C.B., M.A. Price 10s.; to Members, 5s. (*out of print*).

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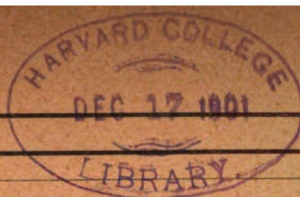
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THE GILDED GLASSES OF THE CATACOMBS.¹

By O. M. DALTON, M.A., F.S.A.

DESCRIPTION OF PLATES.

PLATE I.

Bottom of a glass drinking vessel; a husband and wife with a small figure of Hercules. Inscription: ORFITVS ET COSTANTIA IN NOMINE HERCVLIS ACERENTINO FELICES BIBATIS. The word ACERENTINO perhaps stands for ACERENTINI, the epithet being given to Hercules in honour of his rescue of Alcestis. It may, however, be divided into two words, A CERENTINO, when the sense would be "drink of Cerentine wine." Garrucci, *Vetri*, Plate XXXV, Fig. 1. *C.I.L.* 7036.

Diam. 4.26 in. In the British Museum Collection.

PLATE II.

Bottom of a glass bowl; a gladiator (*retiarus*). On his left shoulder is seen the *galerus*, a piece of armour peculiar to gladiators, and on a *cippus* in the background an inflated skin, *corymbus* or *foliis pugilatorius*, used in boxing exercises. Inscriptions: PIE ZESSES, and STRATONICAE BENE VICISTI VADE IN AVELIAM. *Aurelia* is probably the province of that name in Cisalpine Gaul.

Fröhner, *La Collection Tyszkiewicz: Choix de monuments, &c.*, Plate VIII, Fig. 8.

In the British Museum Collection.

PLATE III.

Bottom of a glass drinking vessel; Daniel killing the dragon of Bel with the poisoned cake. Behind him a figure of Our Lord.

Diam. 3.56 in. Garrucci, *Vetri*, Plate III, Fig. 13, and *Storia*, Plate CLXXIII, Fig. 14.

In the British Museum Collection.

PLATE IV.

Glass disc, probably the cover of a cup. A Cupid with a hoop, etched in gold foil on a dark red ground. From Crete.

Diam. 3.3 in. In the British Museum.

PLATE V.

Glass bowl found at Canosa with two millefiore dishes and other glass vessels. The lower part, from the band of scrolls downwards, is protected by a second bowl, so that the design, which is executed in gold leaf, is enclosed between two layers of glass.

Diam. 8 in. In the British Museum.

¹ Read, April 3rd, 1901.

The gilded glasses, called in Italy *fondi d'oro*, have been known to modern Europe since the time of Bosio (*d.* 1629), the first great explorer of subterranean Rome. All writers upon the catacombs and upon early Christian archæology have had something to say upon them, but it is to the Jesuit Father Garrucci that we owe the most comprehensive treatment of the subject and the most complete series of illustrations. In spite of certain inaccuracies his two works¹ still remain indispensable to students, though since the date of their publication much new material has accumulated which urgently needed incorporation with the old. In a most useful monograph² published two years ago Dr. Hermann Vopel has set himself the task of bringing Garrucci's work up to date, and has furnished a concise and useful treatise to which is added a catalogue of all the specimens known to exist in public and private collections at the time of writing. On the history of the art of decorating glass with gold foil he has much that is interesting to say, and he has endeavoured with considerable success to establish a more accurate chronological sequence in the series of gilded glasses which have been preserved to us. Information previously scattered in the pages of the proceedings of learned societies has now been rendered accessible in one small volume, which will be henceforward indispensable to all students of the subject. The following pages are in large part based upon Dr. Vopel's book.

The gilded glasses are in the great majority of cases the circular bottoms of drinking vessels, from which the sides have been broken away. They usually consist of two layers of glass, on one of which a design is etched in gold leaf, the other serving as a protection or guard. The design was intended to be seen from above; but when both layers of glass were transparent, it was equally visible from beneath, though in this case the inscriptions and figures were seen in an inverted form. As a rule the ornamentation of the vessel was confined

¹ See list of books at the end of this paper. In all references where only the name of the author is given, the full title of the work will be found in the list. Garrucci's two books will be referred to as *Vetri* and *Storia* respectively.

² *Archäologische Studien zum Christlichen Altertum und Mittelalter, herausgegeben von Johannes Ficker. Fünftes Heft. Die altchristlichen Goldgläser, von Dr. Hermann Vopel. Freiburg, Leipzig, and Tübingen, 1899.*

to the circular bottom, which alone was double, but in rare examples it seems to have been continued round the sides. Thus in most cases a single large medallion varying from three to six inches formed the bottom, and the vessel was either a shallow bowl with little more than a low projecting rim for a foot, or a glass rather resembling our modern tumbler.¹ There was, however, a class of broad shallow bowls which, instead of having merely one large ornamental disc at the bottom, had their sides symmetrically studded with diminutive medallions hardly larger than buttons, usually with a dark-coloured background of blue, green, or dull red. Medallions of both kinds, the large and the small, seem to have been occasionally mounted in metal frames and worn on the person as amulets or pendants. One of these (*Vetri*, Plate IV, Fig. 9), now in the Vatican, was found outside a child's grave in the Cemetery of St. Priscilla. The smaller sort were sometimes used like other glass pastes simulating gems, if we may judge from an example mounted on a headband found in Egypt and figured by Dr. Vopel.² The larger may in some cases have been votive offerings or have even been employed to decorate caskets or other similar objects much as Wedgwood's cameos were employed in the last century. A single casket which was discovered at Neuss, near Düsseldorf, in 1847, was entirely composed of rectangular glass panels ornamented with Biblical scenes. Unfortunately this interesting monument has disappeared, and nothing but rather incomplete drawings remain to show what its general appearance must have been.³ But all such independent uses were probably rare. The great majority of the glasses were simply parts of drinking vessels which were impressed in the mortar of the *loculi* or wall-tombs in the catacombs, probably as marks by means of which particular graves might be distinguished from those which surrounded them.⁴ The tombs were not all provided

¹ Several authorities state that one class of the gilded glasses had convex bottoms, so that they would not stand by themselves when filled with wine. This class is not represented in the British Museum collection, where all the examples have the low rim-like foot.

² Page 79.

³ *Bonner Jahrbücher*, Part 63, 1878, 103-113, and Plate IV.

⁴ The delicate sides which projected from the wall were naturally soon destroyed, leaving only the medallions safely imbedded in the mortar. A single example of a perfect bowl was discovered by Boldetti, who broke it in

with inscriptions, and it was the custom for the mourners to stick all kinds of objects into the fresh mortar by which the tiles or slabs that formed the front were closed. Carved ivory plaques, combs, children's toys, cubes of mosaic, beads, coins, *tesserae*, and a variety of other things were all so employed, few of which were distinctively Christian; while sometimes impressions were made with bronze stamps bearing proper names or acclamations. The intrinsic worthlessness and the perishable nature of some of these objects, such, for example, as the leaves of trees, make it almost certain that they were not deposited on the graves because they had been treasured possessions of the deceased during life, but rather for utilitarian reasons. It is interesting to note that the glass *Storia*, 202, 4, is still in position in the mortar of a tomb in the Catacomb of St. Agnes.¹

The method of making the gilded glasses is rather puzzling to those who are not familiar with the technicalities of glass manufacture, for the procedure does not seem to have been invariably the same. The actual designs must always have been executed in a uniform manner by etching with a needle on gold (more rarely silver) leaf previously fixed to the glass by some kind of gum; while if a richer effect was required, a few simple colours were applied, especially to parts of the costume such as the *clavi* or stripes upon the tunics, or the jewelled collars and necklaces worn by ladies.² But the process of covering the design with a protecting guard and of incorporating it with the vessel appear to have been less constant. If a medallion only was required, two discs of glass must have been exposed to a degree of heat just sufficient to cause them to coalesce without damaging the design, or a film of molten glass

the endeavour to remove it from its place. The drawing which he made has, however, been very frequently reproduced (see *Petri*, Plate 39, Fig. 7, and *Smith and Cheetham*, I, 731). It is possible that some glasses may have been broken or trimmed before insertion in the mortar.

¹ On the objects impressed in the mortar of the tombs, see De Rossi,

Roma Sotteranea, III, 574-608, and Plate XVII; abridged by Northcote and Brownlow, II, Bk. V, 1, 266 ff.; and V. Schultze, *Die Katakomben*, Leipzig, 1882, 202.

² In a few rare examples the outlines of the design were deeply engraved and then filled in with coloured paste (*Kraus, Die Christliche Kunst in ihren frühesten Anfängen*, 137).

blown over the surface of a single ornamented disc.¹ If a vessel was to be decorated, the design was probably executed on the bottom, a flux of powdered glass applied to this, and a disc with or without a foot-rim placed over all. The whole was then placed in the oven face downwards, and heated until the melting of the flux caused the disc and the vessel to cohere. Such would at any rate be the procedure with the harder glass of modern times, but it is possible that the softer Roman material, produced by wood fires, would amalgamate at a comparatively low temperature without the interposition of a flux. The bowls studded with small button-like medallions were evidently made in some such way, for portions of the gold can be seen projecting beyond the edges of the protecting blue and green glass at the back. This protection is applied in the form of shallow bosses of coloured glass, a style of decoration common in other Roman glass vessels of the period. Yet another method of providing a guard is that described by Theophilus (see p. 250) as practised by the Byzantine Greeks. Here the flux itself formed the protecting layer, and was applied with a moistened brush; the vessel was then heated until the pulverised glass melted into a continuous film. The presence of three layers of glass upon more than one example in the British Museum suggests that in some cases a finished medallion, with protecting glass complete, was again subjected to heat and welded by fire to the bowl or cup.² One of the principal difficulties with which the manufacturers had to contend was the tendency of the gold leaf to blacken and roll up under the influence of the heat.

The *period* within which the gilded glasses were made has been variously fixed by different authorities, but the general tendency of modern research is to bring many of them down to a later date than that assigned to them by earlier archæologists. Thus Buonarruoti ascribed all to the third century, while de Rossi, though admitting some to the fourth, allows none to be later than 410 A.D., in

¹ This is the method employed by the mediæval writer known as Heraclius (see below, p. 249).

² See Aus'm Weerth, *Bonne: Jahrbücher*, LXIII (1878), 102.

which year the catacombs ceased to be used for interments. The more recent opinion is that they began to be common in the third century, perhaps in the first half of it, and continued without a break until an advanced period in the fifth or even later. The following are some of the arguments on which this opinion is based.¹

No examples are known to have been discovered in the older cemeteries belonging to the first two centuries, a fact which furnishes negative evidence of considerable importance. One was found in a gallery of the catacomb of Callixtus, which dates from the first half of the third century. Impressions left by three others were seen in the cemetery of St. Agnes, close to an inscription of the year 291 A.D. Five came to light in the cemetery of St. Priscilla, near inscriptions considered to belong to the late third or early fourth century. Another was discovered in the catacomb of Sts. Peter and Marcellinus in company with coins of Maximian, with which it may well be contemporaneous. Evidence of this kind based upon the exploration of the catacombs is not in itself absolutely conclusive, but it affords a presumption that, except perhaps in a few very rare instances, the gilded glass does not go back to the second century after Christ. It would have had greater value if the early explorers had been able to put on record the exact localities where individual pieces were found, and thus to supply us with more numerous data from which wider deductions might have been drawn. Let us now turn to the internal evidence of the glasses themselves, from which many probable and some certain dates may be derived; here, in view of the rarity of other monuments, the information furnished by the coinage is especially valuable.

In *Vetri*, 33, 5; *Storia*, 202, 5, we see a number of overlapping coins on which may be distinguished the inscriptions IMP ANTO PI · ·, FAVST · · ·, M · AVRE PIVS FEL. Some of these coins have been attributed by Garrucci and others to Caracalla, but the occurrence of the name FAVST (INA) seems to justify Dr. Vopel in ascribing them to Marcus Aurelius. It cannot certainly

¹ Vopel, 17-33.





A HUSBAND AND WIFE WITH A SMALL FIGURE OF HERCULES
See page 225.

be argued that the glass is contemporary with the Antonines because it bears their effigies. Still, it is perhaps not likely that the coins of these emperors would be thus represented at any very long period after their death. In *Vetri*, 33, 4, we see depicted the goddess *Monetu*. Now this figure is common on coins of the third century, but disappears at the end of it, so that we are probably justified in placing this glass before the fourth century. On *Vetri*, 34, 2 and 4, a quadriga is shown advancing to the front, a position which is only usual on coins after the year 241, before which time the chariot is always shown from the side. The earliest date for these two glasses is therefore the middle of the third century. *Vetri*, 36, 1; *Storia*, 201, 4, shows personifications of Rome and Constantinople¹ receiving the homage of a third female figure, possibly intended for Carthage. Such personifications of the two capitals are found on coins from 330 to 350 A.D., within which period this example probably falls. Two other specimens, one (*Vetri*, 35, 1) in the British Museum, have figures of Hercules upon them, a fact which may possibly connect them with the period of Maximian (abdicated 308 A.D.), who appears on his coins with the attributes of the god. Turning now from the evidence of the coinage, we find further indications of date in the occurrence on several glasses of certain historical names. Thus *Vetri*, 19, 1; *Storia*, 188, 1; *Vetri*, 19, 2; and *Storia*, 188, 2, bear the names of Callixtus (*d.* 217 A.D.) and Marcellinus (*d.* 304 A.D.), while on *Vetri*, 23, 1 and 2; *Storia*, 192, 1 and 2; *Vetri*, 25, 2 and 8; *Storia*, 194, 2 and 8, is found the name Damas, which in all probability stands for Damasus, the well-known bishop, who did so much to preserve Christian monuments, and who died in 384 A.D. Here, again, we cannot be certain that the figures are contemporary portraits, but at least we obtain a *terminus a quo* before which these examples cannot be dated. The inscription

¹ These personifications are found in the miniatures of the Byzantine chronographer, the original of which is attributed to the fourth century (see Strzygowski, *Die Kalenderbilder des Chronographen*, *Jahrbuch des K. Deutschen Arch. Instituts Ergänzungsheft*, I, Berlin, 1888), and on numerous

consular diptychs of the fifth and sixth centuries. The silver treasure of the fourth or fifth century found on the Esquiline, and now in the British Museum, contains statuettes of Rome and Constantinople (see P. Gardner, *J. H. S.*, IX (1888), Plate V, and 77).

AVSONIORVM on one of the small medallions connects it with the Ausonii, a family which flourished at the end of the fourth century.

Further indications of date are provided by features of an iconographical nature. The sacred monogram is found upon more than twenty examples, sometimes plain, sometimes surrounded by a wreath, sometimes, again, flanked by Alpha and Omega. But with a single exception it is always in the earlier decussated or Constantinian form , which predominates in the fourth century and becomes rare in the fifth. The exception is the diminutive medallion set in a headband found in Egypt, which bears the *crux monogrammatica* () a form which is commonest in the fifth century. The simple cross is extremely rare, and one of the examples on which it was found is only preserved in the drawing *Vetri*, 41, 4; *Storia*, 188, 3. Such considerations make it probable that few of the glasses belong to a later period than the early part of the fifth century; but a second argument drawn from the occurrence of the nimbus¹ would seem to tell the other way. In Italy the nimbus as a Christian attribute is first given to Our Lord in the mosaic of Sta. Pudenziana, which is considered to date from the close of the fourth century. It is first extended to persons other than Our Lord in the mosaics of Sta. Maria Maggiore in the first half of the succeeding century, where it is seen round the heads of angels and of the Virgin. Yet even here it has not yet become a mark of holiness as distinct from worldly power, for in the same mosaics it is given to King Herod. Its use in connection with apostles and saints still fluctuated between 500 and 600 A.D., and it is not until the seventh century that it became universal. Now on some ten glasses Our Lord appears with it, and on others it is not

¹ Vopel, 24. Arguments based upon such iconographical details as the introduction of the nimbus must, however, be received with the greatest caution and only accepted as provisional. The dates hitherto regarded as most certain are liable to be overthrown at any moment. For example, it has till now been almost an axiom that the cruciferous nimbus of Our Lord first appeared in the sixth, or at the earliest

in the fifth century. It now seems probable that it was introduced in the fourth, and is therefore almost, if not quite, as old as the plain variety. Production in the eastern or western halves of the Christian world necessarily influences questions of this kind. It seems probable that the initiative in these matters was often due to the East. See J. Strzygowski, *Orient oder Rom*, 56 (Leipzig, 1901).

only given to the Virgin, but to St. Peter, St. Paul, and St. Agnes. Although, therefore, there must always be a certain want of conclusiveness in arguments based on the occurrence or absence of the nimbus before the seventh century, we may assume with some probability that no glasses on which it is found are much earlier than the middle of the fifth century, while some are later. A late date is equally suggested by certain details upon other examples. On one (*Vetri*, 1, 3; *Storia*, 171, 3) is depicted in a very realistic manner the martyrdom of Isaiah. But as the representation of martyrdoms is not known to begin before the fifth century, and the realism of our example points to familiarity with such subjects, it is natural to attribute this specimen to an advanced period in the century at earliest. Again, in the German Campo Santo at Rome there is preserved a glass with the inscription JVSTINIANVS SEMPER AVG, which, if genuine, can only belong to the sixth century. From the foregoing we may conclude that the gilded glasses belong to a period extending from the first half of the third century until a yet undefined time in the fifth or perhaps even in the sixth century.

The principal difficulty in the way of accepting so late a date lies in the fact, already alluded to, that interments did not take place in the catacombs after 410 A.D., while the majority of the glasses were undoubtedly found there. Unless this fact, attested by De Rossi himself, can be called in question, the objection undoubtedly has weight, but may be at least partially met by the following considerations:—For a long time after interments had ceased, it was the custom of Christians to visit the tombs of the martyrs¹; and it is conceivable that on such occasions new glasses may have been deposited or old ones replaced. Secondly, the catacombs are not the only place where the glasses have been found. Examples have been discovered in the ruins of a house at Ostia, at Aquileia, at Castiglione della Pescaja and Castel Gandolfo, as well as in tombs at Cologne and in Egypt.²

¹ Useful outlines of the history of the catacombs may be found in Northcote and Brownlow, and Romilly Allen, *Early Christian Symbolism in Great*

Britain and Ireland (London, 1887), 11.

² Voepel, 20. Kisa, 93.

The later date for some specimens is therefore not rendered impossible by the cessation of burials in 410, but the great majority belong to the fourth century, especially to the second half of it. Those with pagan subjects are usually among the earliest, mostly belonging to the third or early fourth century; then follow those in which signs of Christianity are not obvious, though here some of the symbolic subjects such as the Good Shepherd may form exceptions; lastly come the examples on which the characteristic marks of Christianity are conspicuous, especially those with figures of saints. The general development thus illustrates the transformation of a pagan into a Christian community. The artistic merit of the glasses was never of a high order; they followed the course of decadence usual in Roman art, and deteriorated with the course of time. The pagan specimens are often the best, while many of those with figures of Sts. Peter and Paul bear too evident traces of wholesale production. In some examples, *e.g.* *Vetri*, 17, 1, 2, 4, we can clearly trace the influence of contemporary sculpture, the arrangement of the figures between fluted columns closely recalling the sarcophagi of the most highly developed period. In the simple ornamental borders within which many of the scenes are inclosed we may perhaps recognise imitations of designs executed by workers in metal.¹

The subjects represented on the glasses may be divided into three main classes:—

- I. Those connected with religions other than Christianity.
- II. Those which are purely secular.
- III. Those directly related to the Christian religion.

The very existence of the first class, which may be subdivided into two sections, the pagan and the Jewish, awakens questions of considerable interest; for surprise has often been expressed that subjects of such a character should have been placed by Christians upon the tombs of their dead. It is, however, not astonishing that during

¹ Various arguments in favour of a later date for the gilded glasses than that formerly accepted are given by

Professor Schultze, *Die Katakomben*, 192 and 195-6 (Leipzig, 1882).



A GLADIATOR.
See page 225.

the earlier period of persecution Christians should have refrained from displaying upon objects of domestic use designs which might have exposed their households to suspicion and danger; the same cause would act as a powerful check on the manufacture of such objects. We have already noticed that the other things found impressed in the mortar of the *loculi* are also non-Christian in character, probably for the same reason. Nor is it altogether surprising if in later and happier times we are still confronted by such reminiscences of an abandoned faith, for after the peace of the Church, bowls and cups with subjects of this kind may still have remained in the possession of Christian families, either as heirlooms from pagan ancestors, or gifts from pagan friends. Nor was any previous laxity of feeling likely to disappear at a time when numbers of persons called themselves Christians for political reasons, retaining as much as they could of the old order of things, and only concealing what was absolutely forbidden. It was thus that there prevailed in Rome what has been called the syncretistic spirit, evidences of which can still be seen on works of art which have been preserved to our own day.¹ One notable example is the silver bridal casket of Projecta in the British Museum, where the sacred monogram is associated with mythological scenes; another is a leaden *situla* found in Tunis,² where Christian subjects are mingled with motives drawn from classical mythology. Early Christianity was at no time puritan in matters of art. The early Christians, who grew up in the traditions of the classical school, almost inevitably adopted in their frescoes and sculptures the decorative schemes of pagan artists. But sometimes they show a tolerance almost surprising in its comprehensiveness, accepting without demur subjects which might have been expected to arouse misgivings in the scrupulous. Even in the matter

¹ See E. Le Blant, *Catalogue des Monuments Chrétiens du Musée de Marseille*, 22 ff. (Paris, 1894).

² De Rossi, *Buletino*, 1867, pp. 77-87. Kraus, *Geschichte der Christlichen Kunst*, I (1896), 242. Garrucci, *Storia*, VI, Plate 428, 1 and 2. On this object we see on the one hand

the Good Shepherd, and stags slaking their thirst at streams flowing from the sacred mount; on the other, scenes from the chase, a nereid on a hippocamp and a drunken Silenus supported upon his ass by an attendant. The Greek inscription round the top is from Isaiah xii, 3.

of burial-inscriptions and customs, where a rigid orthodoxy would have been natural, they did not always treat pagan usages in an exclusive spirit.¹ The latitude which prevailed seems to have left it open to Christians not only to use objects with mythological scenes or figures upon them, but even to manufacture them. They were forbidden to make idolatrous figures, "*exceptis iis rebus quæ ad usum hominum pertinent*," a distinction which allows considerable freedom as regards figures considered merely as parts of a scheme of decoration. Even the stern Tertullian distinguished between images made *idololatriæ causâ* and those created merely as ornaments; and that this state of feeling was general throughout the Christian community is established by the history of the saints known as the *Quattuor Coronati*. These men were Christian artificers in the time of Diocletian, and were in the habit of making Cupids and Victories for the ornamentation of public fountains. But when they were called upon to make a statue of Æsculapius for a temple, they preferred to suffer martyrdom rather than consent. It is clear that figures of a pronounced pagan character were produced in Christian workshops, but only on the understanding that they were ornamental accessories and not objects of worship. Although, therefore, the pagan glasses probably belonged in large measure to converted pagan families, the possibility that some of them were made by Christians is not excluded.² Among specifically pagan subjects may be mentioned Cupid (*Vetri*, 35, 7); Minerva and Hercules (*Vetri*, 35, 8); Cupids watching a cock-fight (*Vetri*, 37, 11); and Venus at her toilet (*Vetri*, 36, 3).

The examples with Jewish subjects³ are only nine in number. They do not present objects connected with the old cult while the Temple at Jerusalem was still standing, such as the ark and the altar of sacrifice, but

¹ The letters D.M. (*Dis Manibus*) seem to have been undoubtedly inscribed on Christian tombs. Coins have been found in the mouths of Christian dead in Rhenish graves of the fourth century (*Bonner Jahrbücher*, 1845, 83). See also *Römische Quartalschrift*, 1897, 507 ff.

² On the whole question, see De Rossi, *Roma Sotterranea*, III, 578 ff.; Northcote and Brownlow, Part II, 2, 35 ff.; and a short article in *Römische Quartalschrift für Christliche Altertumskunde*, &c., 1895, 316.

³ On Jewish glasses, see Garrucci, *Vetri*, 44-56.

the seven-branched candlestick, the chest or cupboard (*aron*) containing the scrolls of the law and the prophets, and other things associated with particular feasts, such as the ram's horn, the bundle of branches made up at the feast of Tabernacles, and the unleavened bread of the Passover. With these objects are associated doves and lions, the latter, if not derived from the lions of Solomon's throne, serving as guardian angels, or symbolising the Jewish Church or people (Genesis xlix, 9). These Jewish glasses, most if not all of which were found in Christian catacombs, once more raise the question of a possible laxity or indifference on the part of the Christian community; and here, again, the facts may be explained as in the case of pagan examples. Nor are these gilded glasses the only objects ornamented with Jewish symbols which have been found associated with Christian interments, for terra-cotta lamps with the seven-branched candlestick have often been discovered in Christian burial-places.¹ Who made the glasses is another question; they may either have been produced in pagan workshops, or by Jewish artificers settled in Rome. One example deserves especial mention, as it differs from the ordinary type. It is a representation in perspective of the Temple at Jerusalem, with an inscription in Greek, and was discovered in the cemetery of Sts. Peter and Marcellinus.²

The secular subjects are composed of two principal classes—scenes from daily life, and portraits and family groups. To the first class belong pictures of very varied character. We see boxers with their *lanista* (*Vetri*, 34, 7, 8); a gladiator (Plate II); a money-changer (*Vetri*, 33, 1); a pastoral scene (*Vetri*, 37, 1); a hunting scene (*Vetri*, 37, 2); a tailor's shop with a customer trying on a garment (*Vetri*, 39, 6); a wine shop (*Vetri*, 33, 2); actors (*Vetri*, 34, 1; 40, 1, 2); charioteers (*Vetri*, 34, 2, 4); and a tamer of wild beasts (*Vetri*, 34, 5). The

¹ In one type Our Lord is represented with the seven-branched candlestick. (*Revue Archéologique*, 1889, Part I, Plate VIII). There seems to be some doubt whether Jewish and Christian cemeteries were always mutually exclusive. See a paper on the Necropolis of *Gamart*, north of Carthage, by M. de Vogüé (same

vol. of *Rev. Arch.*, 178 ff.), and a letter of M. Salomon Reinach, *ib.*, 412. The seven-branched candlestick alone would appear to be not necessarily Jewish.

² De Rossi, *Bulletino*, Vol. VII, 1882, 121, 135, 137-158; and 1883, 92.

examples of the second class are too numerous for detailed description. They consist of portraits of individual men and women, of married couples (Plate I) like those so common on sarcophagi, and parents with their children. Most of them are accompanied by acclamations wishing health and prosperity, such as *PIE ZESES, VIVAS CUM CARIS TVIS, VIVATIS IN DEO, VIVAS PARENTIBVS TVIS, DVLCIS ANIMA VIVAS*, often with the addition of proper names; and many of them cast a pleasing light upon the interior of Roman homes under the Empire. Thus in *Vetri*, 31, 1, we see a mother and child with an attendant, the child resting on the mother's knee; in *Vetri*, 32, 2; *Storia* 200, 2, a boy is learning to read by the side of his parents; in *Vetri*, 32, 1, a little boy and his mother are seen together. Of the single portraits, a very fine example is *Vetri*, 33, 3, which represents *Dædalius*, a master shipwright, surrounded by his workmen, who are plying the adze, saw, and drill in the exercise of their craft. To the secular subjects may be added the representations of animals, among which may be noted the lion, panther, stag, and ass.

The glasses with distinctively Christian subjects, which form the third main division of our classification, may again be subdivided into two classes, the first bearing scriptural scenes, the second, figures of saints and martyrs. The first of these two classes is of special interest, because it affords ground for comparison with the treatment of the same subjects in the early frescoes of the catacombs, and on the sculptured sarcophagi of the fourth and fifth centuries. The comparison shows that both these branches of art exercised an influence upon the glassmakers, though without preventing them from manifesting a certain independence and originality of ideas. Sometimes we find a complete deviation from the treatment which routine had rendered traditional in early Christian art; at other times a single scene will combine features severally distinctive of the frescoes or the sarcophagi, as though the humble artist who etched the design were unable to make up his mind which treatment was the best. Of this vacillation the subject of *Moses striking the rock* may be taken as an example. In this



DANIEL KILLING THE DRAGON OF BEL WITH THE POISONED CAKE.

See page 225.

scene the frescoes usually represent Moses as youthful and beardless, while the sculptures show him as a bearded man more advanced in age. In this respect the glasses follow the frescoes, and yet their treatment of the water flowing from the rock is that adopted by the sculptors and distinct from that seen on the walls of the catacombs. A more complete independence of convention is shown by the artist of the Cologne dish (*Storia*, 169, 1), who diverges so widely from habitual usage that the subjects of several of the scenes are still a matter of dispute. This originality leads Dr. Vopel to conjecture that this artist may have been a native of the colony and less a slave to tradition than men actually living at Rome. On some examples, again, subjects are chosen which are not found either in sculpture or painting, such as Joseph in the well, the martyrdom of Isaiah (*Vetri*, 1, 3; *Storia*, 171, 3), and the scene on the same glass representing either the staying of the sun by Joshua, or more probably the setting back of the dial for the sick Hezekiah. Other scenes, for example Daniel poisoning the dragon of Bel (Plate III), (*Vetri*, 3, 13), and the miracle of Cana (*Vetri*, 7, 1 ff.), do not occur on the frescoes, but are frequent on the sarcophagi. Purely symbolical subjects, such as the Good Shepherd and the Lamb upon the Holy Mount, are rare, giving place to scenes directly illustrative of scriptural history; among the latter, subjects from the Old Testament predominate over those from the New, as may be seen from the following tabulated list:—

A.	B.
<i>Old Testament.</i>	<i>New Testament.</i>
<ol style="list-style-type: none"> 1. Adam and Eve. 2. Noah. 3. The Sacrifice of Isaac. 4. Joseph in the Well. 5. Moses. 6. Moses striking the Rock. 7. The Return of the Spies. 8. The Martyrdom of Isaiah. 9. The Putting back of the Dial for Hezekiah. 10. The Quickening of the Dry Bones. (<i>Uncertain.</i>) 	<ol style="list-style-type: none"> 1. The Good Shepherd. 2. The Magi (only one figure). 3. The Miracle of Cana. 4. The Multiplication of the Loaves. 5. The Healing of the Paralytic. 6. The Healing of the Blind Man. 7. The Raising of Lazarus. 8. Our Lord delivering the Law.

11. Daniel in the Lions' Den.
12. Daniel poisoning the Dragon.
13. The Three Children in the Furnace.
14. Tobit.
15. Jonah.
16. Susannah.
17. Job.

Of these 4, 5, 8, 9 are found neither on frescoes nor sarcophagi; 7, 10, and 12 do not occur in frescoes, but are known on sarcophagi.

Here 3 is not uncommon on sarcophagi, but not certainly known in frescoes; 6 is rare in frescoes, very frequent on sarcophagi; 8 seems to show the influence of the mosaics as well as the frescoes, and has an especially close analogy with a picture in the catacomb of St. Peter and St. Marcellinus.

But Biblical scenes form only one part of the religious division; the other class consists of representations of Our Lord, the apostles, saints, and martyrs, which are interesting as showing what saints were specially venerated in the Rome of the fourth century. St. Peter and St. Paul are naturally the most prominent, while other names closely bound up with the history of the Roman Church and often associated together are those of Sts. Sixtus, Timotheus, Hippolytus, and Lawrence, and those of Sts. Callixtus, Marcellinus, and Damasus. But martyrs from distant parts of the Empire take their place beside the saints of the capital; such are Justus and Pastor, who were natives of Spain. Of female saints St. Agnes is most popular. Where portraits of Our Lord are found, He is beardless and youthful in appearance; only in two examples, one of which (*Vetri*, 17, 2)¹ is in the British Museum, is He seen with a beard. Counting fragments, Our Lord is found upon sixteen specimens (*vide* Vopel, pp. 106-107), on fourteen of which he is accompanied by other figures. His name is usually given as *Cristus*, but once *Zesus Cristus* occurs, and twice *Zesus* alone. The sacred monogram is twice found alone, but occurs several times on the portraits and family groups of the second class.

The following is a list of the saints, martyrs, and other persons venerated in Rome, whose names are inscribed on the gilded glasses:—

¹ Garrucci doubts whether this portrait is really intended to represent Our Lord. The late Sir A. W. Franks, in a short paper on Early Christian Glass in

the *Fine Arts Quarterly Review* for 1864, suggested that the name *Cristus* might here be a mistake for *Calistus*.

Agnes.	Marcellinus.
Callixtus.	Maria.
Castus.	Pastor.
Cyprianus.	Paulus.
Damas(us).	Peregrinus.
Dion.	Petrus.
Electus.	Philippus ("Filpus").
Felix.	Protus.
Florus.	Silvanus.
Genesius.	Simon.
(H)ippolytus ("Poltus").	Stephanus ("Istefanus").
Joannes ("Jonanes").	Sixtus or Xystus ("Sustus").
Judas.	Timotheus ("Timoteus").
Julius.	Thomas ("Tomas").
Justus.	Ursus.
Laurentius.	Vincentius.
Lucas.	

Enough has perhaps been said of the subjects represented upon the glasses to enable us to form some opinion as to the purpose for which they were made. It has often been suggested that they had a ritual use, and were employed at the celebration of the Eucharist, but the miscellaneous nature of the subjects and the form of the vessels themselves, which is unlike that of the earliest chalices known to us, render such a supposition improbable. It is possible that a few examples, like those found at Cologne (*Storia*, 169, 1, and 170, 1), may have served as patens, though of this there is no certain evidence. Zephyrinus in the third century ordained that glass should be used for eucharistic vessels, but silver was shortly afterwards adopted; and though the use of glass was not forbidden, the less fragile material must soon have come into general use. There is no positive proof that any of the gilded glasses now existing were employed in the service of the altar.¹ Other suggestions, as that they were employed not directly as chalices but to distribute the wine from the chalice, or that they held consecrated wine which was buried with the dead, rest upon an equally insecure basis. A third theory, that they were used at the Agape, though less unlikely from some points of view, is vitiated by the fact that the original Agape was abolished by the second half of the fourth century, to which period, as we have seen, the majority

¹ The probability is discussed by Northcote and Brownlow, II, Book V, 2, 322.

belong. Some of them may certainly have been used at the feasts in commemoration of martyrs and saints, especially those which bear the effigies of St. Peter and St. Paul. In support of this view Dr. Vopel has noticed that names which follow each other closely in the calendar are often associated upon the same glass, which could then be used to commemorate more than one person. For example, Our Lord is found with St. Stephen, St. Agnes with the Spanish martyr Vincentius, while Sts. Sixtus, Lawrence, Hippolytus, and Timothy, who are found together or in pairs, all have their days in the month of August. The great number of specimens with the figures of St. Peter and St. Paul point to the natural popularity of the two apostles in Rome. In the fourth century the feast of St. Peter was kept with all kinds of excesses, and St. Augustine and others complain of the drunkenness which frequently prevailed.¹ It was a general custom to go to the *memoriae* or chapels of the martyrs, and there to partake of food and wine in their honour. From a well-known passage in St. Augustine, where St. Monica is praised for taking with her only one cup, we may gather that others took several, perhaps a different one for every shrine visited, each ornamented with the figure of a different saint; usages of this kind would account for those glasses of which figures of saints are the principal ornament. It is probable, however, that the greater number of the gilded glasses were used at gatherings of a less ceremonial nature, such as birthday feasts and other family celebrations. They sometimes bear inscriptions which are purely convivial and evidently of secular origin.² They were the gifts of friends and relatives, the equivalents of the birthday and wedding presents of our own times.

But it is precisely owing to this domestic character that the *fondi d'oro* gain in human interest what they lose in the dignity of religious association. Their evidence is not without value to those who study the archæology of the late Roman period. It is impossible in this place to discuss more than a single point of which

¹ Northcote and Brownlow, II, Book V, 2, 306. De Rossi, *Bulletino*, 1864, 83. Vopel, 85.

² E.g. QVI SE CORONABERINT BIBANT (cf. Marquardt, *Das Privatleben der Römer*, 2nd edit., 336-7).

this proposition is true; I will therefore consider their importance to the history of costume. We are enabled to supplement by their study the information afforded by painting and sculpture, information which as regards the later part of the period in question is rather meagre.¹ We see how ladies and children were clothed, we can trace in part the evolution of male garments, which were soon to develop into the vestments of the Roman Church. At the close of the period which the glasses cover, the final severance of the ecclesiastical garb from that of the layman was already impending, and we can still see in everyday use garments which were shortly afterwards set apart for the service of the Church. And of secular garments we see the most famous, the toga, entering the last stage of its development before it finally disappeared.

The transformation of Roman dress witnessed by the first centuries of our era was unfavourable to the graceful drapery which we associate with classical times. Little by little the simple and dignified folds were, so to speak, frozen into something stiffer and more ornate, reaching its climax in the jewelled raiment of the Byzantine Emperors. The inspiration of these changes came from the East, and one of its first effects was the general adoption of the *pallium*, itself a simple garment, but the precursor of a new order of things. The *pallium* was the cosmopolitan garment of philosophy and science, and as such was the necessary rival of the toga, the distinctive mark of the Roman citizen. It was the garment which Our Lord and the apostles were supposed to have worn; in it they are habitually represented in early painting and sculpture, and in it they appear within the narrow compass of the gilded glasses. For these reasons it was held in high honour by the Christian community; yet it never entirely superseded the toga, which was preserved partly by the aristocratic associations of the

¹ Our knowledge of certain garments, especially of the tunic, has been largely increased by the discoveries in the Christian cemeteries in Egypt, especially in that of Akhmîm (Panopolis). The *clavi* or stripes, and the *tabulae* or *orbiculi*, applied to rectangular or circular

ornaments such as are seen upon the gilded glasses are here preserved in the original materials (cf. Kurabacek, *Die Theodor Graf'schen Funde in Ägypten*, Vienna, 1883, and R. Forrer's works on Akhmîm).

past, but principally by a convenient modification of its original voluminous form. This alteration was effected by the adoption of the fashion known as *contabulatio*,¹ which consisted of folding the toga into four, so that it looked like a long narrow band. When worn thus folded it had the appearance of a scarf and no longer concealed to the same extent the surface of the tunic beneath. This was an additional advantage, because the tunic in process of time became more ornamental, and was freely embellished with the stripes known as *clavi*, and the circular rosettes or patches called *orbiculi* or *calliculae*.² An upper tunic called a *dalmatica* with short broad sleeves had come into use, and was itself sometimes used out-of-doors; while if further protection was needed, the poncho-like *pænula* or *planeta*, or the *lacerna*, were often preferred to both toga and pallium. The toga was indeed preserved more as a mark of social rank than anything else, and both as the *trabea* of the consul or as the plainer garment of the senator was always worn in the contabulated form. The fashion is clearly illustrated by the consular diptychs of the fifth and sixth centuries,³ and by a number of our gilded glasses, though here in a less satisfactory manner, owing to the inferior precision of the work. It is probable that the type of garment worn by men in *Vetri*, Plate XXVI, is the *toga contabulata*, though it has hitherto been considered, on the authority of Garrucci, to be another kind of mantle known as the *laena*. The comparative frequency with which the toga thus appears, suggests that it may have been worn not only by senators but also by all persons of wealth or distinction, a view which is supported by the fact that boys also wear it (*Vetri*, Plate XXX). If this is so, it may be assumed that the wearers of the garment, and by implication the owners of the glasses, were persons of some social position.

¹ For the fashion of *contabulatio* and its consequences, see the valuable studies of Monsignor Wilpert, "Un Capitolo di Storia del Vestitario," *L'Arte*, 1898; and *Die Gewandung der Christen in den Ersten Jahrhunderten* (published by the Görresgesellschaft, Vol. III), Bonn, 1898. From these two

essays the following remarks are derived.

² Cf. Forrer, *Die Gräber und Textilfunde von Akhmim Panopolis*, Plate VIII, Figs. 10 and 11.

³ Cf. Meyer, *Zwei Antike Elfenbeintafeln der K. Staatsbibliothek in München*, 26-7, Munich, 1879.

The embroidered robes worn by the wives of these men may be the feminine equivalent of the toga, possibly the *palla contabulata*, and may equally be marks of social position. A similar costume may be seen on the diptych of the Consul Philoxenus (A.D. 525) now in the Bibliothèque Nationale, Paris.¹ It was to the feminine pallium or *palla* that contabulation was first applied at the end of the second or the beginning of the third century, probably on the analogy of the costume worn by the priestesses of Isis; the fashion was then extended to the toga before the fourth century had begun. The male pallium resisted the change longer, and did not succumb until about the middle of the fourth century.² In this case the alteration has an exceptional interest from the probability that the *pallium contabulatum* was the direct ancestor of the *pallium sacrum*, or archiepiscopal pall of the Roman Catholic Church. The growing popularity of the *pænula* or *planeta* in the fourth century threatened the existence of the pallium, just as the pallium had itself threatened the existence of the toga. But it was felt impossible to abolish a garment so closely associated with the earliest days of the Church; so by the process of contabulation it was converted into a narrow band, and worn above the pænula as a mark of ecclesiastical rank. But as the pænula was a poncho without sleeves, the pallium could no longer go under the right shoulder as heretofore, but was obliged to pass over it instead. It now rested on both shoulders like a collar, whence the Greek name *ῥιμοφόριον*, with one end hanging down in front and the other behind; and it was held in position by three pins or brooches, one over the breast, one on the right shoulder, and one behind.

Gradually the heavy contabulated folds were transformed into a single strip, a transformation already effected before the end of the sixth century, as may be seen from the fresco placed above the tomb of St. Cornelius by Pope John III,³ and from the figure of

¹ Figured by Molinier, *Histoire des Arts Industriels*, Vol. I, *Icoires*, 30, Paris, 1896.

² In 382, it is enjoined by the *lex vestiaria* of Theodosius as the distinctive

mark of the *officiales* (vide Wilpert, *Capitolo*, 99, 100).

³ Figured by Wilpert, *Capitolo*, etc. 106, Fig. 17.

Bishop Maximianus in the mosaics of San Vitale at Ravenna. By the ninth century the awkward pins had been abandoned, and the pallium was made in one piece ; and though the length of the pendants has been shortened, the general structure has remained the same to the present day.¹ Other garments have survived in a similar manner through their adoption by the Church ; the *planeta* was the prototype of the chasuble, and the *lucerna* or *byrrhus*, of the cope. The upper tunic or dalmatic had become an ecclesiastical vestment as early as the time of Sylvester (A.D. 314–335).

It may be of interest to conclude these notes on the gilded glasses by a few remarks on their relationship with other glass decorated with gold foil in earlier and later times. The discovery of the great majority of the specimens in the Roman catacombs induced the earlier antiquaries to regard the skill which produced them as something exclusively Christian ; but as we have already seen, examples have been found outside Rome, while the occurrence of Jewish and pagan subjects makes it improbable that none but Christian artificers were employed in their manufacture. It is not astonishing that the number found beyond the limits of the catacombs should be very small, for they were exposed to greater risk of destruction, and even their fragments had from the first little prospect of preservation. Itinerant dealers in ancient Rome were always on the look-out for broken glass, which could be sold for remelting or for mixing with sulphur to form a kind of solder.² The presence of gold, even in the attenuated form of gold leaf, would render the fate of broken *fondi d'oro* doubly sure. De Rossi once found a fragment from which most of the gold had been deliberately scraped away. The predominance of discoveries in the catacombs does not therefore prove an exclusively Christian origin. There was, indeed, little

¹ Theories on the origin of the *pallium sacrum* are numerous. In addition to derivations from the *toga* (cf. Rock, *The Church of our Fathers*, II, 30), there are others from the *lorum*. The latter was a narrow band or scarf, and seems in some cases (e.g. on consular diptychs) to be confused with what Wilpert would call

the *toga contabulata*. On the whole question see Rohault de Fleury, *La Messe*, VIII, 45 (1889), and Grisar, *Festschrift zum 11-hundert-jährigen Jubiläum des Deutschen Campo Santo in Rom*, 83–114 (Freiburg, 1897).

² Martial, *Ep.* I, 42. Various passages in Juvenal allude to such employment of broken glass.



A CUPID WITH HOOF.
See page 225.

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antecedent probability that the early Christians should have suddenly invented a style of decorating glass unknown to their pagan neighbours.

But there is something more than negative evidence for believing that the Christians only adapted to their own use a process which had already found favour with Roman workmen, and that this process was not invented in Italy. There seems to be a great probability that Egypt, the country in which glass was first made, was the home of this late development of the glassmaker's art. It is well known that about the beginning of the Christian era Alexandria was the great centre where glass was manufactured; and from this city, as from Venice in later times, it was distributed in great quantities throughout the civilised world. In the early days of the Empire the art was transplanted into Italy, first into Campania, and subsequently into Rome, where its products largely displaced the more costly vessels of silver plate. The objects which still exist as documents in support of the Egyptian origin of the gilded glasses are not very numerous, but they are of considerable interest. Herr Theodor Graf, of Vienna, has obtained from Egypt a medallion with a figure of Minerva¹ executed in the style of the catacomb glasses, and probably dating from quite an early period of the Empire. From the same country come the headband, also belonging to Herr Graf, containing the little medallion with the *crux monogrammatica*, and various beads, chiefly discovered at Akhmîm (Panopolis) with gold leaf imbedded in their mass.

It is conceivable that the *ιάλινα διάχροσα* mentioned by Athenæus (*Deipnosophista*, V, 199) as possessions of Ptolemy Philadelphus may have been of the nature of the gilded glasses, though there is no positive proof that such was the case. If they were, the history of the process is carried back more than two centuries before Christ. There are other objects now in the British Museum, which, though not found in Egypt, were probably made there. Of these the most important are two hemispherical bowls from Canosa (Canusium), the lower parts of which are double, enclosing an acanthus ornament

¹ Figured, Vopel, 77.

finely executed in gold leaf (Plate V). These bowls, which are of earlier date than the *fondi d'oro*, are accompanied by a flat millefiori dish from the same place, imbedded in which are a number of small rectangular pieces of gold foil.¹ The Museum has also recently acquired a thin glass disc about the size of the catacomb glasses, obtained in Cyprus, and having etched in gold upon a dark red ground a figure of Cupid holding a hoop (Plate IV). The disc has at present no protecting glass, but was probably the cover of a cup. Such discoveries seem to mark definite stages on the route from Alexandria to Rome. Vessels enclosing gold foil have been found in Etruscan tombs, and beads similar to those from Akhmîm are said to have occurred in Danish graves.²

Just as the employment of our process did not begin with the early Christians, so it did not end with them; but before it had passed out of their hands it was adapted to one most important purpose. There is reason to believe that it suggested the idea of making the gilded cubes of glass-mosaic so largely employed in Rome from the close of the fourth century. These cubes are formed of a mass of opaque or coloured glass covered on one surface with gold leaf, above which is a very thin layer of transparent glass, probably applied in the manner described by the mediæval writer Theophilus.³ In the influence which they exercised upon the development of the art of mosaic, some authors have, indeed, seen the principal importance of the gilded glasses.⁴

The use of gold for the ornamentation of glass continued under the Byzantine Empire, and specimens thus decorated have been preserved.⁵ In the West, we cannot be sure that the art persisted without intermission. The first definite allusion to it after the barbaric invasions we owe to the monk commonly known

¹ A bowl of similar glass with the same kind of ornament is figured by Deville, *Hist. de l'Art de la Verrerie*, Plate VIIIA (Paris, 1873).

² For a more detailed account of these and other facts relating to the use of gold leaf in decorating glass in early times see Vopel, 3, and Kisa, 91 ff.

³ See p. 250.

⁴ Lobmeyr, Ilg, and Böhme, *Die Glasindustrie*, p. 38, Stuttgart, 1874.

⁵ In private collections (Vopel, 4). I have not been able to make out whether these glasses afford an exact parallel to the *fondi d'oro* through the possession of protecting guards. The Byzantine glasses in the Treasury of St. Mark at Venice, if one may judge from Pasini's *Catalogue*, do not appear to have any such protection.



BOWL FROM CANOSA.

See page 225.

as Heraclius, who is thought to have lived in Italy, possibly in Rome itself, in the tenth century. His work, *De Coloribus et Artibus Romanorum*,¹ is a collection of rules and recipes relating to the minor arts written in hexameters. In a well-known passage in the fifth chapter of his first book he describes his endeavours to imitate a procedure known to the earlier Romans. Although the lines are familiar to students of the subject, I will translate a few of them to show how closely allied is the process described by Heraclius to at least one of those adopted by the early Christians.

"I found," he says, "gold leaf cunningly enclosed between two layers of glass. After I had carefully considered it, growing more and more perplexed, I procured some phials of clear glittering glass. To these I applied gum with a brush. Then upon this I laid gold leaf; and when it was dry, I engraved thereon birds, men, and animals as my fancy moved me. When this was done, with cunning blast I blew over them a thin coating of molten glass. After they had felt the heat thoroughly, the thin glass amalgamated with the phials in a most satisfactory manner." The passage is interesting as showing that though the manufacture had probably died out in the troubled period between the sixth and tenth centuries, a tradition of it still survived in the monasteries. It may even be conjectured that some specimens of early Christian glass were still in existence, and that it was by these that the speculations of Heraclius were called forth. The next mention of glass decorated with gold is in the famous *Schedula diversarum Artium*² of Theophilus, a monk whose real name was probably Rugerus, and who worked in North Germany about a hundred years after Heraclius's time. In Chapter XV of his second

Translated by Mrs. Merrifield: *Original Treatises dating from the Twelfth to the Eighteenth Centuries*, London, 1849. German edition by A. Ilg in *Quellenschriften für Kunstgeschichte und Kunsttechnik des Mittelalters*, etc., edited by R. Eitelberger Von Edelberg, Vol. IV, Vienna, 1873. The British Museum possesses a thirteenth

century MS. of Heraclius (Egerton, 840A).

² R. Hendrie, *An Essay upon Various Arts in Three Books, by Theophilus called also Rugerus*, London, 1847; and Ilg in *Quellenschriften*, etc., Vol. VII (1874). See also E. Aus'm Weerth in *Bonner Jahrbücher*, LXXVI (1883), 79 f.

book he describes the manufacture of glass cubes for mosaic by overlaying the gold leaf with a coating of pulverised glass subsequently brought to a state of flux by heat. He adds that glass cups were ornamented by the Byzantine Greeks by the application of pulverised glass in a similar fashion. Some method of decorating glass with gold, silver, and tin seems to have been known in France and England in the Middle Ages, as Jean de Garlande (eleventh or thirteenth century) alludes to vessels thus ornamented. At the end of the fourteenth century Cennino Cennini, an artist of Padua, in his treatise on painting¹ explains how to make panels of glass decorated with gold for caskets and reliquaries. His description includes the process of applying the gold leaf and of etching the designs upon it with a needle, but seems to ignore the provision of any protecting glass or guard. Glass pictures reputed to be of about this period, and answering very closely to Cennini's description, are sometimes provided with an upper protecting glass, apparently welded to the lower after the fashion of the gilded glasses. At South Kensington there are several examples, one a crucifixion on a dark background mounted in a gilt frame, with smaller plaques in the same style representing apostles, the symbols of the Evangelists, and the pelican in her piety.² In the same museum are several other specimens of mediæval etching in gold foil on glass; one is a portable altar of maple wood with small plaques inlaid in the border; another, a Nativity, is in the Salting collection (No. 1215), and has next to it a later example representing a secular subject; this last is stated to be German and to belong to the sixteenth century. In the British Museum there are one or two small examples, of fourteenth century workmanship. In the sixteenth century coloured glass dishes ornamented on the bottom with gold figures protected by an upper coating of glass were made in Venice.³ In the seventeenth century,

¹ *Il Libro dell' Arte o Trattato della Pittura*, ed. Florence, 1859, 123 ff. There is an English translation by Christina Herringham: "*The Book of the Art of Cennino Cennini*", London, 1899.

² Cf. a very similar example in the Church of the Holy Cross at Rostock: *Zeitschrift für Christliche Kunst*, 1895, 278-9.

³ Kira, 99.

perhaps as a result of recent discoveries in the catacombs, Kunkel endeavoured to reproduce the gilded glasses.¹ Attempts made in the following century appear to have met with greater success, but the discoverer died without publishing the secret.² There are in various museums certain medallions purporting to come from the catacombs which have usually been considered spurious, and these may date from this period. They have smooth edges and have never formed parts of drinking-vessels, while their subjects are principally portraits. One example now in the British Museum and formerly, it would appear, in the collection of Horace Walpole at Strawberry Hill, was figured, though not very accurately, in the *Archæological Journal* forty years ago.³ Two others which seem to belong to the same class may be seen at South Kensington. Dr. Vopel is inclined, however, to rehabilitate some of the specimens condemned by Garrucci, on the ground that they bear a close resemblance to a medallion, now in the Vatican, found by Professor Armellini in 1878 in the catacomb of Callixtus under circumstances which would make deception difficult.⁴ It is perhaps in favour of this view that among the specimens of doubtful appearance said to have been found in Sicily, and figured by D'Orville,⁵ there is one small medallion, representing Our Lord with the rod of power, which has all the appearance of being genuine. Medallions of this kind cannot therefore be condemned indiscriminately, but it can hardly be doubted that some are the work of modern times. There seem to have been no further attempts at reproduction until the present generation. In 1858 Cardinal Wiseman,⁶ who took a lively interest in Garrucci's publication, delivered a lecture on the catacomb glasses at Dublin.

¹ Kunkel, *Ars Vitraria Experimentalis*, II, 12. Frankfurt and Leipzig, 1679. Cf. also Kisa, 99.

² Caylus, *Recueil d'Antiquités*, III, 195, Paris, 1759. In the same passage Caylus describes experiments made by a distinguished chemist, M. Majault, in the manufacture of gilded glass.

³ Vol. VIII (1851) 170. See also *Proceedings*, Winchester, 1845, xxxix.

⁴ *Gli Studi in Italia*, 1878, 178.

⁵ *Sionla*, ed. Burmannus, 1764, 123a.

⁶ *The Sermons, Lectures, and Speeches delivered by His Eminence Cardinal Wiseman during his Tour in Ireland in August and September, 1858*, 164-215, Dublin, 1859.

In the course of his remarks he stated that efforts had recently been made in England to manufacture cubes of gilded glass mosaic like those used in Italy, but without success, the gold leaf curling up and turning black when the protecting layer was applied. Not very long ago, however, Salviati of Venice succeeded in producing medallions and bowls with enclosed designs after the real fashion of the *fondi d'oro*.¹ Successful experiments have also been made in the present year by N. H. J. Westlake, Esq., F.S.A., who applies the gold foil by means of a mordant such as sugar and water, covers the design with a flux, lays on this a second sheet of glass, and then subjects the whole to a heat sufficient to melt the flux and cause the two layers to unite. As an example of the use of gold leaf between two protecting glasses, very much in the mode of the antique bowls from Canosa, we may note the tumblers made in Bohemia in the eighteenth century, which are made double, one part fitting closely into the other. It will be seen from the above rapid summary that this style of glass decoration has had a long and varied history, lasting, though not without intermission, from the times of the Roman Empire to our own. As is both natural and fitting, the largest and most important collections of the gilded glasses are to be found at Rome, where, in the Library of the Vatican, the Kircherian Museum, the Roman College, and the Museum of the Propaganda, the majority of existing specimens are to be found. Among the collections outside Rome, that in the British Museum holds a foremost place.

¹ See *Bonner Jahrbücher*, 1879, 119; Vopel, 5.

LIST OF THE PRINCIPAL WORKS WHICH TREAT OF THE GILDED GLASSES.

- Buonarruoti, F. *Osservazioni sopra Alcuni Frammenti di Vasi Antichi di Vetro Ornati di Figure Trovati nei Cimiteri di Roma*, 1716. (This book has for all general purposes been superseded by Garrucci's works, but both text and illustrations are still of value to the student.)
- Boldetti. *Osservazioni sopra i Cimiteri dei Santi Martiri ed Antichi Cristiani di Roma*, 1720 (pp. 14, 60, 191, 192, 194, 197, 200-202, 205, 208, 212, 216, 334, 514). (Superseded by Garrucci's volumes; need not be consulted by the general reader. The book is not of equal value with Buonarruoti's work.)
- Garrucci, R. (1) *Petri Ornati di Figure in Oro*, 2nd ed., 1864 (42 Plates). (2) *Storia dell' Arte Cristiana*, Vol. III, 1876. (These two works are the classics on the subject and should be consulted in the first instance. The illustrations are drawn in outline.)
- Perret, L. *Les Catacombes de Rome*, Vol. IV, Plates 21-38, Paris, 1851. (A costly *édition de luxe* only accessible in large libraries. The illustrations, though not always quite accurate, give a better idea of the actual appearance of the glasses than those of Garrucci, as the gilded parts are reproduced in gold.)
- Bonner Jahrbücher = Jahrbücher des Vereins von Altertumsfreunden im Rheinlande*, Heft 36, pp. 119 ff. (1864); 42, pp. 163 ff. (1867); 63, pp. 99-114 (1878); 71 pp. 119 ff. (1881); 81, pp. 49-77 (1886). (Articles by E. Aus'm Weerth, H. Düntzer, and C. Bone, on the gilded glasses discovered in Cologne and neighbourhood.)
- De Rossi, J. B. *Buletino di Archeologia Cristiana* (Rome), years 1864, pp. 81 ff., 89 ff.; 1868, pp. 1 ff.; 1874, pp. 126 ff.; 1882, pp. 131 ff., 137 ff., 158. (Articles on individual discoveries.)
- De Rossi, J. B. *Roma Sotterranea Cristiana*, Vol. III, p. 602 (Rome, 1877). (Very short statement, but preceded (pp. 580 ff.) by an account of the various other objects fixed like the glasses in the mortar of the loculi.)
- Kraus, F. X. *Die Christliche Kunst in ihren frühesten Anfängen*, Leipzig, 1873, pp. 135-144. *Roma Sotterranea*, 2nd ed., 1879, pp. 328 ff. (Based upon De Rossi's work of the same name.) *Realencyklopädie der Christlichen Altertümer*, Vol. I, 1880, pp. 609 ff. (art. "Glasgefässe," by Heuser—a good summary). *Geschichte der Christlichen Kunst*, Vol. I, 1896, pp. 479 ff. (A short statement.)
- Smith and Cheetham. *Dictionary of Christian Antiquities*, Vol. I, 1875, pp. 730 ff. (Short account.)
- Martigny. *Dictionnaire des Antiquités Chrétiennes*, ed. 1877, pp. 327 ff., 349 ff.
- Schultze, V. *Archäologische Studien über altchristliche Monumente*, 1880, pp. 203-211. *Die Katakomben*, 1882, pp. 187-198. *Archäologie der altchristlichen Kunst*, 1895, pp. 306 ff. (Summaries with valuable remarks bearing on the question of date.)
- Roller, Th. *Les Catacombes de Rome*, Vol. II, 1881, pp. 222 ff. (Two plates; remarks confined to the glasses with portraits of St. Peter and St. Paul.)
- Northcote and Brownlow. *Roma Sotterranea; or, An Account of the Roman Catacombs, etc.*, compiled from De Rossi, new edition 1879, Pt. II, Bk. V. (Based on De Rossi's book, *Roma Sotterranea*. It is provided with useful coloured plates, which, next to those of Perret, give the best idea of the general appearance of the glasses.)
- Kiss, A. *Die Antiken Gläser der Frau Maria vom Rath zu Köln*, Bonn, 1899, 92-100. (Summary, with especial reference to the historical development of the art of ornamenting glass with protected designs in gold leaf.)

ROMAN ANTIQUITIES IN SOUTH GERMANY.

By PROFESSOR BUNNELL LEWIS, F.S.A.

I do not propose, as may perhaps have been expected, to take a comprehensive view of Roman remains in South Germany; this would be a task beyond the limits of a memoir, and too extensive for my faculties, either of mind or body. I shall limit my remarks to objects of art and antiquity personally observed, or suggested as deserving notice by the local *savants* whose acquaintance I had the pleasure to make.

On former but not very recent occasions I had the honour to read at meetings of the Institute descriptions of mosaics at Palermo and Avenches. I now invite your attention to a similar work of art at Rottweil, in the kingdom of Wurtemberg. This flourishing town is pleasantly situated in a beautiful country on the line of railway from Stuttgart to Schaffhausen, and therefore easily accessible.¹ In the year 1784 remains of walls, a tessellated pavement, and Roman coins were found on a hill south of Altstadt-Rottweil, which led to the conjecture that the Romans had a settlement here. In 1817 further excavations were undertaken, and brought to light more antiquities. In 1832 an archæological society was formed which vigorously pursued explorations. Two years later they succeeded in uncovering a locality containing a mosaic of about 24 square feet, divided into compartments, with the figure of Orpheus in the centre. This floor rested on stone slabs, supported by stone pillars (*pilae*). As the soil was only ankle-deep above the mosaic, the cultivation of the land caused much

¹ Rottweil is not far from the source of the Neckar, and commands fine distant views—"mit schöner Fernsicht" (Baedeker, *Süd-Deutschland*, ed. 1876, 93). It lies south-west of Tübingen, which in situation surpasses other

universities in Germany, as Stuttgart does the capital cities. Its shady walks and general aspect please the educated Englishman, often reminding him of his own Alma Mater.

injury to it. On this account in 1865 it was removed to the Lorenzkapelle in Rottweil, and still remains there.¹ Experience proves that mosaics, if left *in situ* without protection, inevitably suffer deterioration; they must be preserved either by building a house over them, as at Nennig, or by removal to a church or museum where they will be under inspection and safe.²

Orpheus occupies the post of honour in a square, enclosed by two borders, one very narrow, the other broader and divided into eight compartments. They were adorned with some groups of which only fragments now exist; and for want of space these have not been replaced according to the order in which they were discovered. The Thracian bard, seated, wears a Phrygian cap, and from under it locks of hair show themselves. He has a youthful appearance, and is looking sideways and upwards.³ His right hand holds the *plectrum* close

¹ I have derived my information concerning the history of these discoveries from a small pamphlet published in 1881, whose title does not indicate the existence of any Roman remains—*Verzeichniss der altheutschen Schnitzwerke und Malereien in der St. Lorenzkapelle zu Rottweil*. But it contains an appendix—"Die römischen Alterthümer dieser Kapelle."

² Any person who has studied classical mosaics will be fully alive to the necessity of removing them or of erecting buildings over them, as he can recall instances where they would otherwise have perished, *e.g.*, those found at Lillebonne (*Juliobona*, *Guides-Joanne*, *Normandie*, ed. 1882, p. 306), Promenades de Reims, Vienne in the Département Isère, Nennig between Trèves and Thionville.

Professor J. H. Middleton wrote an interesting article on mosaics of various periods, *Encyclopædia Britannica*, 9th ed., XVI, 849-855, with illustrations, Figs. 1-5; but he has not mentioned even by name any of those to be seen in France, which of all in continental Europe are the most accessible to us. He dwells on the mosaics of North Africa, and very naturally, as some of them are deposited in the British Museum. This essay, bearing date 1878, could of course contain no account of a tessellated pavement discovered in 1896, which is interesting from an artistic point of view, but surpasses the rest by its historic value—"Les Mosaïques

Virgiliennes de Sousse," *Planche XX*, fully described by P. Gauckler in one of the publications of the *Fondation Eugène Piot*. I abridge his account of this precious monument:—

"The poet clothed in an ample white toga, with narrow blue border, faces the spectator, is seated on a chair with a back to it, and rests his feet on a step in front. A roll on which are inscribed the following words lies open on his knees:

"*Musa mihi causas memora quo numine læso,
Quidve.* . . ."

"With head erect, right hand on the breast, and forefinger raised, he listens to Clio and Melpomene; standing behind him they dictate his poems. The Muse of History holds with both hands a manuscript, the Muse of Tragedy a mask; the latter wears a rich costume of a red colour and embroidered with gold lace; she listens attentively while Clio reads."

³ We may not unreasonably suppose that Orpheus is looking up to the Muse for inspiration, as according to the mythographers he was the son of Calliope; and such an interpretation would agree with the designs of Monnus at Trèves, which Dr. Hettner has described, with an illustration, in *Separatabzug aus der Westdeutschen Zeitschrift für Geschichte und Kunst*, Jahrgang X, S. 209 fg.

to a five-stringed lyre resting on his thigh ; his left plays it with extended fingers. A red mantle is fastened by a brooch (*fibula*) on his right shoulder, and drawn back over the breast ; it falls behind on the seat, and thence to the ground. The under-garment is of a greenish blue colour, with a black border ; it reaches to the calf of the leg. A magpie on the spectator's left, and a raven on his right, are perched on trees ; they listen with closed beaks to the harmonious sounds, while below a dog opens his mouth wide, and looks up towards the musician. In the opposite corner we see a bird which might be a heron or an ostrich, but is too imperfect to be certainly identified.

The *plectrum* (πλῆκτρον) was a short stick with which the player struck the chords. Its form is much better shown in a photograph of the Palermitan mosaic, which I exhibit, than in the compilations generally used for educational purposes ; here Orpheus is represented holding the *plectrum* almost at arm's length away from the lyre. Cicero, *De Natura Deorum*, II, lix, 149, says that his fellow-countrymen were accustomed to compare the tongue to the *plectrum*, the teeth to the strings, and the nostrils to the horns of this instrument.¹ At Palermo Orpheus wears only a short tunic that comes down to his knees, but the chief difference from that at Rottweil consists in the greater number of birds and beasts—nineteen altogether—that surround him.²

Philostratus Junior wrote a book which bears the title *Imagines* (Εἰκόνες). It professes to be an account of pictures which he had seen ; which, however, some suppose to have been only imaginary. It delineates in animated language the birds and beasts—all alike, wild and tame—listening to the music of Orpheus, and subdued by it ;³ but I refer to this passage especially be-

¹ "Ea (lingua) vocem immoderate profusam fingit et terminat, quae sonos vocis distinctos et pressos efficit, quum et ad dentes et ad alias partes pellit oris. Itaque plectri similem linguam nostri solent dicere, chordarum dentes, nares cornibus iis, qui ad nervos resonant in cantibus."

² This mosaic shows an utter want of arrangement, the various creatures being

scattered promiscuously ; it is just the opposite to that near Kreuznach, where symmetry prevails throughout the composition. See my paper on "Antiquities in the Museum at Palermo," *Arch. Jour.*, XXXVIII, 151-153.

³ On the other hand, at Corinium (Cirencester) we see the influence of music over savage animals indicated, and probably with a symbolic allusion.



ORPHEUS, FROM A MOSAIC PAVEMENT AT ROTTWEIL.

cause the description of Orpheus corresponds so well with our mosaic. "He is represented as a youth—the first down of a beard sprouting on his chin—wearing a tiara that gleams with gold, looking upwards with eyes expressing tenderness, inspiration and devotion to the service of the gods." Such enthusiasm, strongly marked in the countenance of Orpheus at Rottweil, is the feature by which it excels all other figures of the kind that I have seen in ancient pavements.

The story of Orpheus is one of the most interesting of the old Hellenic myths; I might even go farther, and say that for the inquiring archæologist it has more attractions than any other, whether he considers the earlier and later legends, the recurrence of the subject in Græco-Roman art, the adoption of this type by the Christians, or the frequent references to it made by our own epic poet. Even the difficulties that attend these researches only increase the fascination of the pursuit. At first we find the power of music symbolized by animals, trees, and stones moving at the sound of the lyre; afterwards a new myth was added, and Orpheus is punished by the gods for the benefits he had conferred upon men.¹

Very numerous are the mosaics, in localities far removed from each other, portraying the bard amidst birds and beasts, and it is not an improbable conjecture that the Romans preferred this subject as indicating the blessings of civilisation, which they diffused among barbarous races whithersoever they went and conquered. Professor Paul Knapp, in his treatise *Über Orpheusdarstellungen, Beilage zum Jahresbericht 1894–5 des Kgl. Gymnasiums in Tübingen*, reprinted separately, p. 29,

¹ Horace, *Carm.*, I, xii. 7–12.

"Unde vocalem temere insecutus

Orpheæ silvæ,

Arte materna rapidos morantem

Fluminum lapsus ocleresque ventos,

Blandum et auritas fidibus canoris

Ducere querens."

Ars Poetica, 392–396, he couples Amphion with Orpheus, and gives us the legends in a different metre, but the subject is the same:—

"Dictus et Amphion, Thebanæ conditor arcis,

Saxa movere sono testudinis et præce blanda

Ducere quo vellet."

Propertius, *Elegies*, IV (III), i, 1–4:—

"Orpheu, te lenisse feras et concita dicunt

Flumina Threïcis sustinuisse lyra;

Saxa Cithæronis, Thebas agitata per artem,

Sponte sua in muri membra coisse ferunt.

As in Horace, so here, Orpheus and Amphion are mentioned together. The name of the latter does not occur; however, the allusion cannot be mistaken.

has enumerated ten places where mosaics of this class have been discovered—at St. Marinella, near Cività Vecchia, Carnuntum (Lower Austria), Vienne (Isère), Isle of Wight, North Africa, etc. He omits the fine specimens which adorned the ancient villas in England. Foreign *savants* often show great ignorance concerning Romano-British antiquities, but we cannot censure them, being ourselves no better informed about continental monuments.

Orpheus occurs in sculpture also, not infrequently; but for the present a single example must suffice. That at Pettau (Poetovio, Colonia Ulpia Trajana Poetovio in Pannonia Superior) is described at length by a well-known archæologist, Professor Alexander Conze, of Berlin, in his *Römische Bildwerke Einheimischen Fundorts in Österreich (Separatabdruck aus dem XXIV Bande der Denkschriften der Philosophisch-Historischen Classe der Kaiserlichen Akademie der Wissenschaften 1875)*. Plate V is an engraving of a tomb-stone at Pettau.¹ In the reliefs of the lower part, which has been much injured, we may still discern that the visit of Orpheus to the lower world is represented. On the spectator's right, Mercury, easily recognised by his *petasus* and herald's staff, stands behind a throne on which a male and female divinity are seated—Pluto and Proserpine, I presume. Orpheus stands in front of them, playing his lyre. The figures behind him are effaced to such an extent that the attribution is quite uncertain—one of them may possibly be "his half-regained Eurydice."² The most important

¹ *Poetorio* appears to be a more correct form than *Petovio* (v. Orelli's note on Tacitus, *Histories*, III, 1). Pettau is a town in the south-east of Styria (Steiermark) near the frontiers of Croatia and Carinthia (Krain); it is also a station on the railway from Pragerhof to Buda-Pest (Ofen). Many antiquities have been discovered there recently; some of them have been removed, as is usually the case in Continental Europe, to the capital of the province, Graz. The legion XIII Gemina was quartered at this place (my paper on Buda-Pest, *Arch. Jour.*, L, Appendix, sub finem).

² Milton, *L'Allegro* :—

"That Orpheus' self might heave his head

From golden slumber on a bed
Of heap'd Elysian flowers, and hear
Such strains as would have won the ear

Of Pluto, to have quite set free
His half-regain'd Eurydice."

Ausführliche Lexikon der Griechischen und Römischen Mythologie, herausgegeben v. W. R. Roscher, 43 and 44 Lieferung, 1901, contains a very elaborate article on Orpheus—pp. 1058–1207. See esp. pp. 1202–1207. *Altchristliche Orpheus-dars'ellungen*, with figure 17. *Orpheus unter den Tieren; Rückwand eines Arcosoliums in S. Domitilla (nach Bottari, Scult. e pitt. sagre 2, 71)*. This class of monuments belongs to the second to fourth centuries.

group surmounts the inscription. Orpheus, wearing the Phrygian cap as usual, semi-nude, is seated, playing the lyre in the same attitude as at Rottweil; to right are an elephant, lion, ox, stag, and perhaps a fox; to left a camel and boar, with two other animals not easily distinguished. A border below is filled with animals running, and that above with birds, one of which seems to be a cock. Apparently these creatures have no connection with the story of Orpheus, as they show no sign of attention to his music. In the pediment is a female, whose limbs only are draped; she turns towards a recumbent figure. In each corner a winged boy holds a torch. Crowning the whole monument we see two lions, back to back, and a bearded human head, perhaps of Jupiter Ammon, between them. Compare Plate VII, a similar sepulchral relief, at St. Martin am Pacher.

The inscription filled a proportionately large space between the upper and lower groups, but is now nearly illegible, which may be accounted for partly by the exposed position of the monument in the market-place of Pettau, partly by its having been used as a pillory or whipping-post (*Pranger*), to which culprits were fastened by nails and bonds. However, we can still read DEC, the abbreviation for *Decurio*, a member of the senate in a *municipium* or colony, where the highest magistrates were called *Duumviri I. D. (juri dicundo)*.¹

Compare *C.I.L.*, III, i, 517, No. 4069, Pannonia Superior, Poetovio. The explanation of the group below the inscription seems to have been copied by Mommsen from some preceding antiquary, and is by no means satisfactory. I have followed Conze's interpretation, which corresponds well with the figures still visible on the stone. Poetovio was doubtless a town which grew up, like many others, around the camp of a legion; it must have been at one time an important place, as the inscriptions found there occupy pp. 510-520, Nos. 4015-4098, in *C.I.L.*, *l.c.*²

¹ *Dictionary of Antiquities*, 3rd ed., I, 697.

² Consult Jacobi, *Castrum zu Saalburg*. This book was specially recommended to me by Professor Adolf Michaelis, of Strasburg University, as giving the best description of a Roman

fortress. It should not be confounded with an earlier and much smaller work by Cohausen and Jacobi, which is only a brochure. The huts (*canabae*) of camp-followers, sutlers, cooks, etc., gradually developed into towns, of which we have an example at Regium also

In the Antonine Itinerary, besides the form of the word given above, we find *Patavione* and *Petorione* (v. Index to Parthey and Pinder's edition); but the inscriptions in the place itself or its neighbourhood and the Florentine manuscript (indicated by the letter M, i.e. *Codex Mediceus*, in *Tacitus, Histories*, III, 1, edit. Orelli) have Poetovio. Πουρόβιον (Ptolemy, II, xiv, 4)¹ and Petobio (Ammianus Marcellinus, XIV, xi, 19) are examples of the common interchange between the letters B and V. This town was on the frontier of Noricum and Upper Pannonia, and probably on the right bank of the Drave (Drau); the modern Pettau is on the left. As it is a station on the railway from the junction at Pragerhof for Buda-Pesth, and about 20 miles south-east of Marburg, which is on the main line from Graz to Trieste, the traveller will easily make his way to it, whether he approaches from the side of Hungary or Styria. Many of the objects found here have been removed to the Landesmuseum Joanneum at Graz. I have received valuable assistance there from Professors Arnold Luschin Ritter von Ebengreuth and Wilhelm Gurlitt, who are members of the Curatorium, and I am sure that they will be pleased to exhibit and explain to the antiquarian visitor the monuments in their collection, Celtic, Roman, etc.

This institution issues annual reports containing accounts of recent discoveries and of additions to its treasures by purchase or donation, e.g. for the year 1895, published in 1896, pp. 50–59, C, prehistoric collection and cabinet of antiques and coins; p. 57, a tabulated list of new acquisitions. As a specimen of contemporaneous researches I may mention excavations in the Necropolis near Pettau (see *Römische Lampen aus Poetovio im besitze des Steiermärkischen Landesmuseums "Joanneum," von Dr. Otto Fischbach, mit 7 Tafeln*, Graz, 1896, especially p. 4, seq.).

If the digression may be allowed, I should like to notice a marble head engraved in Conze's memoirs on the

(Ratisbon). See my paper on "Augsburg and Ratisbon," Part II, s.f. *Arch. Jour.*, XLVIII, 408, especially Note 1, where inscriptions are cited.

¹ See the Notes in Car. Müller's edition of *Ptolemy*, I, 292, for various readings.

Roman sculptures found in Austria, Part III, pp. 11-13, Plate XVI, A, B (*Denkschriften d. k. Akad. d. Wissensch. philos.-histor.*, Cl. XXVII, Bd. 1877). A young man's head with the horns and ears of an ox is figured here. It has been inserted in a wall of the passage through the so-called Old Gate at Cilli¹ in the south of Styria, near the frontier of Carniola (Krain). The ancient town was Municipium Claudium Celeia. The Romans settled there at an early period of the Empire,² as is proved by an inscription, No. 5232, recording citizenship bestowed upon an inhabitant by the deified Augustus. The name Claudium is derived from the Emperor Claudius (Pliny, *Nat. Hist.* III, xxiv, § 146. The third volume of *C. I. L.*, ii, 631-648, contains the inscriptions found in the place, which has many architectural remains, and in its vicinity (*Ager Celcianus*).

Several conjectures have been proposed for the explanation of the sculptures above mentioned, by no means rare at Celeia, but the most probable is that adopted by Conze, viz. that they were intended for river-gods. Compare Horace, *Carmina*, IV, xiv, 25,

*Sic tauriformis volvitur Aufidus,
Qui regna Dauni praeffluit Apuli,*

and see the notes in the editions of Orelli and Wickham, where parallel passages are quoted.³ Conze refers to the

¹ Cilli is a station on the railway from Graz to Trieste, south of the junction at Pragerhof. The ancient Celeia was in the south-east part of Noricum (Antonine *Itinerary*, Celeia civitas . . . mpm XXIII, edit. Wesseling, p. 129; edit. Parthey and Pinder, p. 61).

² The Roman occupation is also indicated by the name of another station somewhat farther south, Römerbad—Blavonic, Teplitz, "warmes Bad"—as well as by monumental stones (Baedeker's *Süd-Deutschland und Österreich*, edit. 1876, p. 448).

³ Comp. Euripides, *Ion*, v, 1261, ὦ ταυρόμορφον ὄμμα Κηφισοῦ πατρός, with Paley's note; Homer, *Iliad* XXI, 237, where the river Scamander endeavours to overwhelm Achilles with his swelling waves.

ὁ δ' ἰκτίσσυτο οἰδματι θύων.

τοὺς ἐκβαλλε θύραζε, μεμνῶνς ἤύτε ταύρος;

Sophocles, *Trachiniae*, vv. 9-13, ποταμός, Ἀχελϋὸν λίγῳ . . . φοιτῶν ἐναργῆς ταύρος, . . . ἄλλοι' ἀνδρείῳ κύτει βοῦπῆρος (cf. *ibid.*, 507, sqq., ποταμοῦ σθίνος, ὑπὸ κίρῳ τετραπόρου φάσμα ταύρου, Ἀχελϋὸς ἀπ' Οἰνιάδων); Virgil, *Georgics*, IV, 371 sqq.,

"Et gemina auratus taurino cornua
vultu,

Eridanus, quo non alius per pingua
cultis,

In mare purpureum violentior
effluit amnis";

Aeneid, VIII, 77.

"Corniger Hesperidum fluvius reg-
nator aquarum";

with Conington's notes on both passages.

Maclean, in his edition of Horace, *loc. citat.* (*Bibliotheca Classica*), says that river-gods are not represented with horns in the ancient works of art that have survived. This assertion is contradicted by the statement of Conze mentioned above, and refuted by the

Salzburg Theseus-mosaic as a proof that a man's head with bovine horns was not unknown in Noricum as the type of a river-god; in this case water is flowing out of the horn. So on the coins of Gela (Sicily) the profile of a rushing man-headed bull, with eye shown in full length, represents the river-god Gelas¹ (*v. History of the Characteristics of Greek Art*, by the late Sir George Scharf, prefixed to Wordsworth's *Greece, Pictorial, Descriptive and Historical*, p. 41; and B. V. Head, *Historia Numorum*, 121, Fig. 75, comp. 123, Fig. 76). The river Achelous appears on some coins "usually attributed to Oeniadae, which may be preferably given to Stratos, the chief town of the Acarnanian confederacy" (*Brit. Mus. Cat.*, Plate XXIX, 15—autotype; Head, p. 281). It may be observed that Stratos was on the right bank of this river (see also Metapontum, with a remarkable legend AXEAOIO AEOAON indicating that games were celebrated in his honour, at which these coins were prizes, *ibid.*, p. 63). Similarly the human and equine forms were combined in the centaur, but the parts united were not always the same. The earlier

evidence of coins (*v. Leake, Numismata Hellenica, s.v. Oeniadae, European Greece*, p. 79 sq.). Reckhel explained this class of medals as relating to the worship of Bacchus, but notwithstanding his great authority, in this case later writers have declined to follow him.

¹ Blakesley on Herodotus, VII, 153, discusses the name Gela, an Oscan and Sicilian word for which Stephanus Byzantinus gives the Greek equivalent πᾶχνη (*pruina*)—probably akin to the Latin *gelu*, and expressing the cold temperature of the water.

Compare the Cydnus in Cilicia, where Alexander the Great is said to have bathed and caught a violent illness. Plutarch, *Vita Alexandri* M., § 19; also the *Apocalypse*, III, 15, 16, Epistle to the Laodicean Church, "I know thy works, that thou art neither cold nor hot" (οἶτι οὐτε ψυχρὸς εἰ οὐτε ζεστός). Professor W. M. Ramsay, in a letter to my brother, the late Rev. S. S. Lewis, 1888, says, "The hot stream . . . flows from springs at Hierapolis down through the plain, and disappears in a hole before reaching the Lycus. . . . Lycus, Caprus Asapus and Cadmus are all cold streams. These rivers are tributaries of

the Maeander, flowing northwards and carrying down melted snow from the neighbouring mountains. The Lycus valley is interesting because three Christian churches were planted there, also because it was 'in the highway of the world.'" Professor Ramsay, *St. Paul the Traveller and the Roman Citizen*, pp. 274 and 359. Murray's *Handbook, Turkey in Asia*, edit. 1878, Route 11. *Four of the Seven Churches*, p. 309, Colossae, Laodicea and Hierapolis. The last is about 5 miles north of Laodicea. Here are the hot mineral springs of the celebrated ancient baths of Asia.

Alford has a long note on this passage in the Book of Revelation; however, it contains no allusion to the local circumstances which appear to have been present to the writer's mind. In these days an editor of the Greek Testament requires other qualifications besides a knowledge of various readings and German commentaries; he should avail himself of the researches of recent travellers and archaeologists, which, as illustrations of the sacred text, would prove most useful.

Greek art, as we know from the vases, exhibited the fore legs of a man and the hind legs of a horse ; but Phidias in the metopes of the Parthenon made them all equine.

Returning to Orpheus, we find proof that his memory was venerated at Rome in a place that bore his name—*Lacus Orphei*, on the borders of the Fifth Region (Esquiliae), near Trajan's Baths. Martial alludes to it in the following lines (*Epigrams*, X, xix, *edit.* Schneidewin) addressed to the younger Pliny, vv. 6–10 :—

*Illic Orphea protinus videbis
Udi vertice lubricum theatri,
Mirantesque feras avemque regis,
Raptum quae Phryga pertulit Tonanti.*¹

Line 5, *Altum vincere tramitem Suburae* assists us to define the locality, for the Subura was in “the valley formed by the extremities of the Quirinal, Viminal, and Esquiline.” Moreover, the ancient name reappears in the neighbouring churches, Santa Agatha, Santa Lucia and San Martino in Orfea. The *lacus* was a semi-circular pool with steps, with a figure of the Thracian bard above it. Recent English editors have not understood the passage, but it seems to have been correctly interpreted by Friedländer in a note on the passage quoted above, and by Dr. Paul Knapp in his treatise *Über Orpheusdarstellungen*. Again, Lampridius (*Life of Alexander Severus*, XXIX) informs us that this Emperor honoured Orpheus by placing his statue together with Abraham and Christ in a *Lararium* or domestic chapel, where he worshipped them as deities.²

It is the adoption of Orpheus as a substitute for the Good Shepherd that has invested the heathen fable with new and extraordinary interest. In this case there can be no doubt, for the old classical type was sometimes followed without modification, of which practice the example in the catacombs of St. Calixtus at Rome is probably the best. The Christ-Orpheus is seated, and

¹ Smith's *Dictionary of Greek and Roman Geography*, II, 828, s.v. Roma. Martial desires Thalia to carry his book to his friend the younger Pliny.

² *Ælius Lampridius, l.c.*, “In larario suo—in quo et divos principes sed optimos electos, et animas sanctiores, in quibus Apollonium et quantum scriptor suorum

temporum dicit Christum, Abraham et Orpheum et hujuscemodi ceteros habebat, ac majorum effigies—rem divinam faciebat,” *edit.* Jordan and Kyssenhardt, Berlin, 1864; for notes v. Variorum edition Lugduni Batavorum, 1671.

playing the lyre, as usual, with trees on either side where birds are perched, and four-footed beasts at his feet. The group fills an octagon, and around it eight compartments form a circular border; here landscapes alternate with scenes from the Old and New Testament—Moses striking the rock opposite our Lord raising Lazarus, represented as a mummy, and Daniel in the lions' den opposite David holding a sling with a stone in it.

Many writers have supposed that the Good Shepherd bearing a sheep on his shoulders, so common in early Christian art, is derived from the pagan Hermes Criophoros, whose statue at Tanagra is mentioned by Pausanias, IX, xxi, 1; but there seems to be good reason for rejecting this interpretation.¹ The parable of the lost sheep supplies a sufficient motive, if we bear in mind the evangelist's words, "When he hath found it, he layeth it on his shoulders, rejoicing" (Luke xv, 5); and compare them with the expression which occurs twice in another gospel, "I am the Good Shepherd" (John x, 11 and 14). But this favourite idea manifested itself in various forms; so in the mausoleum of Galla Placidia, daughter of Theodosius the Great, at Ravenna, we see the Bonus Pastor, a youthful figure, draped and seated, holding a cross in the left hand, and caressing with the right one of his sheep, while all the rest turn their faces towards him.² A bronze signet ring, noticed by Dr. Fortnum, shows us a shepherd

¹ Professor J. H. Middleton, in his *Descriptive Catalogue of the Lewis Collection of Gems and Rings*, now in the possession of Corpus Christi College, Cambridge, devotes considerable space (pp. 52 to 56), to an account of a very fine and large Christian gem of exceptionally good execution, with illustration at p. 53, No. 48. Christ the Good Shepherd stands on an anchor, holding on His shoulders a horned sheep; at His feet are two lambs, and in the field on each side is a fish. Behind and extending over the figure of Christ is a tree, on the topmost branches of which three birds are seated. Professor Middleton follows the general opinion that this type was derived from an early Greek design of Hermes Psychopompus. At p. 84 a curious gem is engraved, which is a very rude representation of the Crucifixion, but inter-

esting as one of the earliest examples of this subject, perhaps of the fifth century A.D. Two figures are standing by; one is Longinus with the spear that pierced Christ's side. The Christians of the third and fourth centuries, inheriting the traditions of "the cheerful spirit of paganism," avoided the painful scenes of torture and death which medieval artists delighted to portray (Kugler's *Handbook of Painting*, English translation edited by Sir C. L. Eastlake, I, 14). The genius of ancient manners and of ancient art, though these were inwardly shaken to their foundation, may still be seen to retain its influence.

² For a description of this mosaic refer to *Arch. Jour.*, XXXII, 426. A good photograph of it may be obtained at Ravenna.

holding an olive-branch towards two sheep—an apt illustration of our Lord's saying, "Peace I leave with you" (John xiv, 27).¹

A newly discovered sarcophagus at Salona, in Dalmatia, presents the same subject, but with some features different from those already mentioned. Christ, as the Good Shepherd, occupies the post of honour under a central arch supported by spirally fluted columns with Corinthian capitals. He wears a tunic and mantle, shoes and leggings, and has a pouch hanging at His left side; with a rapid movement He carries away a sheep on His shoulders. A peacock, holding the end of a festoon in his beak, sits on either extremity of the pediment that surmounts the arch. The sarcophagus was intended for the remains of a married pair, who are placed in similar but smaller niches, the husband on the spectator's right, and the wife on the left, with an infant at her breast. Behind these two statues of the deceased many small figures of different ages are crowded together. On the cover we perceive a female recumbent, holding a wreath. When the Christians in times of persecution saw these sacred emblems of the Good Shepherd in gems, marbles, mosaics and wall-paintings, their eyes must have rested upon them with peculiar pleasure, while they remembered that most tender of all invitations, "Come unto Me, all ye that labour and are heavy laden, and I will give you rest" (Matthew xi, 28).²

Some have supposed that the Virgin Mary with the infant Christ and Joseph were represented on the longer side of the sarcophagus; but Conze calls attention to the roll in the man's left hand, and quotes De Rossi, who says he has never seen Joseph in this attitude, which

¹ Dr. Fortnum has contributed to the same *Journal* many interesting memoirs. For our present purpose the following are the most important:—XXVI, 137-148, "On some Finger-rings of the Early Christian Period," especially p. 141 *sq.*, No. 6. Behind Him is an olive tree. . . . The two sheep, or lambs, may also be intended to represent the Church of the Circumcision and the Church of the Gentiles, to both of whom He offers the peace of His blessed

doctrine. *Ibid.*, XXVIII, 266-292, and XLII, 159-170, Notice of a few more early Christian gems. These papers are copiously illustrated.

² "Böhmische Bildwerke einheimischen Fundorts in Österreich, herausgegeben von Alexander Conze," I. Heft, drei Sarkophage aus Salona, Tafel II (*Denkschriften d. k. Akad. d. Wissensch. philos.-histor. Cl.*, XXII, 1872, pp. 12-16).

might be suitable for a prophet.¹ Moreover, the faces of these two personages have portrait features, not conventional or imaginary, but real. The sexes are divided in the groups of small figures, and it is difficult to explain them.

Virgil in the Fourth Georgic, vv. 453–547, relates the myth of Orpheus—the loss of his wife, his descent to the infernal regions, his music charming Pluto, the recovery of Eurydice, her return to the lower world, caught back when he looked upon her, his lamentation for this repeated loss, and at last his tragic death² :—

His gory visage down the stream was sent,
Down the swift Hebrus to the Lesbian shore.³

It is certainly the most pathetic of the beautiful episodes with which he adorned the finest didactic poem that has ever been written. This story was a favourite with Milton, as we may infer from his frequent references to it.⁴ I may be permitted to quote one at length, because it gives more details than other passages, and contains allusions, historical and biographical, that may have escaped the notice of many readers, *Paradise Lost*, Book VII, vv. 32–39 :—

But drive far off the barbarous dissonance
Of Bacchus and his revellers, the race
Of that vile rout that tore the Thracian bard
In Rhodope, where woods and rocks had ears
To rapture, till the savage clamour drown'd
Both harp and voice; nor could the muse defend
Her son. So fail not thou, who thee implores :
For thou art heavenly, she an empty dream.

(*Denkschriften d. k. Akad. d. Wissensch. philos.-histor. Cl.*, XXII, 1872, p. 13, "De Rossi sagt vom Joseph in der altchristlichen Kunst 'non ricordo avergli giammai veduto in manoil volume'" (*Bullettino di Archaeologia Crist.* 1865, S. 25). Conze appreciates De Rossi justly: "Der wie nicht leicht ein Zweiter das in Betracht kommende Material beherrscht."

² Fope, in his *Ode for Music on St. Cecilia's Day*, has imitated Virgil, especially in Stanzas IV, V and VI (see Warburton's notes in his edition of Pope's works, 1760). I only quote the concluding lines:

"Of Orpheus now no more let Poets
tell,
To bright Cæcilia greater power is
given;

His numbers rais'd a shade from hell,
Her's lift the soul to heav'n."

Dr. Johnson criticizes this poem in his biography of the author, *Lives of English Poets*, IV, 178–180, edit. 1781. Compare Dryden's *Ode* with a similar title.

³ Milton, *Lycidas*, 62, which appears to follow Virgil, *Æneid*, I, 316 sq., "Vel qualis equos Threïssa fatigat Harpalyce volucrumque fugâ prævertitur Hebrum," where some have proposed to read *Eurum*. See the commentaries in Todd's edition of *Milton's Poetical Works*, III, 353; and the notes of Heyne and of Burmann in the edition of Virgil by the latter, I, 95–97, 1746, 410. The various readings are fully discussed by Forbiger *in loco*.

⁴ *Paradise Lost*, III, 17; *L'Allegro*, 145; *Il Penseroso*, 105.

There seems to be here an oblique satire on the dissolute court of Charles II., and an expression of fear that the Royalists might take their revenge on an author who had pleaded the cause of the regicide government (*Defence of the People of England*).

By a very easy and natural transition the early Christians passed from the Good Shepherd to Orpheus in their artistic representations; as the former led his sheep and was known of them (St. John x, 14), so the latter, surrounded by animals, charmed them with the music of his lyre.

im P · CAES · G · AVRE · VAL · DIOCLETIAN
p. C. 294. SAR · MAX · PERS · MAX · TRIB · POT · XI · IN
IMP · CAES · M · AVR · VAL · MAXSIIMI
MAX · PERS · MAX · TRIB · POT · X · IMP · VIII · CO
ET · VAL · CONSTANTIVS · ET · GAL · VA
ESS · MVRVM · VITVDVRENSEM · AS
AVRELIO PROCVLO V · I/ I/R¹

The history of this inscription is curious. It was seen at Constance by Leonardo Aretino, who was born at Arezzo in Tuscany 1369, and died 1444. He was usually called after his native city, though his family name was Bruni.² He informs us that he found at Constance a

¹ I have copied this inscription from Mommsen's work, which appeared in the *Mittheilungen der Antiquarischen Gesellschaft in Zürich*, Zehnter Band, 1854, and is entitled "Inscriptiones Confœderationis Helveticæ Latinæ," p. 47, § xix, Vitudurum, Vicus Helvetiorum (Oberwinterthur), No. 239. Mommsen also gives conjectures which have been added to complete the sense.

² So Italian painters often are not called by the names of their families, e.g., Raphael (Sanzio), Correggio (Antonio Allegri, whose initials AA may be seen in the Pinacoteca at Parma), Perugino (Pietro Vannucci). I^r. index to Vasari's *Lives of the Painters* at the end of Vol. V in Bohn's *Standard Library*. Leonardo Bruni studied Greek under Chrysoloras, and was a distinguished member of the band of learned Italians patronised by Cosmo de' Medici. He held the office of apostolic secretary to Popes Innocent VII, Gregory XII, Alexander V and John XXIII. His contemporary Carlo

Marsuppini was also called Aretino; Roscoe, *Life of Lorenzo de' Medici*, Vol. I, chap. I, p. 58, notes, 1819, edit. Bohn. At the time of the Reformation many great scholars changed their names by translating them into Greek or Latin equivalents, e.g., *Schwarzerd* became Melancthon (from μέλας and χθών), *Hauschein* Oecolampadius (from *olcos* and λυμῆς), and *Gerard* Desiderius Erasmus, more correctly Erasmus, ἱερῆμος: Jortin, *Life of Erasmus*, Vol. I, p. 3. "In his youth he took this name, having before gone by that of *Gerard*, which in the German language means *amiable*." Here I think the biographer has mistaken the signification of the syllable *ger*, which appears in many compounds: McMillan's *Historical Grammar of the German Language* (from Professor Behagel's *Deutsche Sprache*, Chap. VI, Proper Names, p. 143). But a better authority may be cited: Friedrich Kluge, Professor in the University of Freiburg in Breisgau, *Deutsches Etymologisches*

marble tablet containing ancient letters; none of the inhabitants could read it, but they thought there was some peculiar sanctity in it. With this superstitious notion, women (*mulierculae*) and other ignorant persons rubbed their hands on it, and then rubbed them on their faces, so that the letters were nearly effaced. Apianus, who flourished in the sixteenth century, says that the inscription was in the chapel of St. Blaise, near the choir of the cathedral, where it still remains.¹ A cast may also be seen in the Sammlung des Rosgartens.² Probably it

Wörterbuch, p. 135, s.v. *Ger*, "Masculinum nach gleichbedeutendem Mittelhochdeutsche Althochdeutsche *ger masc.*" Kluge gives the following examples:—*Gerbert* (ahd. *Gêr-brāht* eigentlich Speerglänzender); *Gerhard* (ahd. *Gêrhart* Speerkühn); *Gertrud* (ahd. *Gêrtrūt*); Vergl. *Gehren*, *Geisel*.

¹ Apianus is the latinised form of the German name Bienewitz (literally Bee-wit, i.e. skilful as a bee), being from *apis*, the diminutive of which, *apicula*, appears in the French *abeille*. This author was born in 1495 and died in 1552; he distinguished himself especially in geography, astronomy, and mathematics; of the last subject he was Professor in the University of Ingolstadt. As a reward for his principal work, *Astronomicum Caesarium*, the Emperor Charles the Fifth presented him with 3,000 pounds in gold. But Apianus was also an archæologist, and his book, entitled *Inscriptiones sacro-sanctae vetustatis, non illae quidem Romanae, sed totius fere orbis*, is frequently cited. See *C. I. L.*, III, Part 1, edit. Mommsen, *Index Auctorum*, p. xix; V, Part 1, ed. Mommsen, p. xiii, where the sources from which Apianus derived his collection are indicated; VI, Part 1, ed. Henzen, De Rossi, and Bormann, § XXV, which is the most important reference in *C. I. L.* The first edition of *Apiani Cosmographia* (*Cosmographici Liber*) was printed at Landsbut in Bavaria, 1524. The title page is copied in the Supplement to Brunet's *Manuel du Libraire*, published in 1878.

Apianus must not be confounded with Appianus (*Ἀππιανός*), of Alexandria, a Greek writer of Roman history (*Ῥωμαϊκά*), who flourished in the reigns of Trajan, Hadrian and Antoninus Pius. He composed his work on a peculiar plan, not treating his subject as a whole and in the usual chrono-

logical order, but dividing it into separate parts, each of which was an account of a nation more or less connected with Rome, e.g., Gaul, *Κελτική*; Spain, *Ἰβερική*; Macedonia, *Μακεδονική*.

² Rosgarten Museum. An interesting and ornamental brochure has been published descriptive of this collection, *Führer durch die chorograph. Sammlung des Rosgartens in Konstanz*, 1889. Comparatively few Roman remains have been found in this city, accordingly a small space is devoted to them. Mention is made of graves discovered in the Hussen-Strasse, named after the Reformer who suffered martyrdom outside of the town (No. 815, *Acta Concilii Constantiensis*, Hagenau, 1500; Voynich's Second List of Books, 1903), fragments of buildings in the Münster-Platz, in the Konradi-Gasse and the western walls of Constance, probably of the third century after Christ. The collection also includes a Mithras-head, a stone tablet found at Eichenz with an inscription supplying evidence that Tasgetium stood there, figures of deities, especially those belonging to the worship of Priapus, from under the Rhine-bridge and the island of Reichenau. These relics of antiquity are important because they confirm our faith in history, and prove that we have not believed "cunningly devised fables." We learn from Velleius Paterculus and Strabo that Tiberius, afterwards Emperor, successfully waged war with the Vindelici and other tribes in South Germany; but, as far as I know, Dion Cassius is our only authority for the fact that he launched a flotilla on the Bodensee (Book LIV, Chap. 22, edit. Sturz, III, 295; *Adnotationes*, VI, 128, Note 186).

Lindau is supposed to have been the base of the military operations of Tiberius in his campaign against the South Germans; under the circumstances it

was removed from Vitudurum (Oberwinterthur) to its present position by some Bishop of Constance, who might wish to possess it as a proof that the origin of this city might be traced to the Emperor Constantius mentioned therein (v. 5). The monument being now in Badish territory, I thought I might fairly include it amongst the Roman antiquities of South Germany.

The *Tribunica Potestas*, an annual office, enables us to fix the date exactly, as given above; IMP(erator) with a numeral after it would not answer the same purpose. In the preceding year an important event occurred in the annals of our own country. Carausius, who had for some years maintained an independent sovereignty in Britain, was murdered by Allectus. The medalllic history of the former by the famous antiquary Stukeley is well known. Gibbon has remarked that the British Emperor displayed, on a variety of coins that are still extant, his taste and opulence—chap. xiii (Vol. II, p. 11, edit. Smith), and compare note 28 (p. 72).¹ Considerable difficulties beset the interpretation of this broken tablet. I have followed the text given by

suiting his purpose very well, being situated on a large island 100 Bavarian acres in extent (Schmidt's *Reisebücher*, *Berlepsch, Schweiz*, Route 23, p. 80, edit. 1882). "Die Heidenmauer unweit vom Schützengarten, vermeintlich einst röm. Wartthurm, wie man annimmt unter Tiberius' Regierung (?) erbaut." (Meyer's *Reisebücher*, *Redaction Berlepsch, Schweizer Führer, Illustriert*, Route 1, p. 56, edit. 1870, *Alpen-Panorama von Lindau aus gesehen*). Comp. Keller's *Reisekarte der Schweiz*.

¹ SAR in the foregoing inscription may be expanded from the legend of a coin which I exhibited, VICTORIAE SARMA TICAE. Cohen, *Les Monnaies frappées sous l'Empire Romain*, 2^e édition, continuée par Feuervant, 1880-1892, tome VI, p. 489 sq., Nos. 487-492. Cohen, *op. citat.*, tome VII, p. 43, "Carausius, Dioclétien et Maximien Hercule." Plate intercalated in the text. No. 1. Obverse, CARAVSIVS ET FRATRES SVI, Buste radié de Carausius à gauche, accolé aux bustes de Dioclétien et de Maximien Hercule, tous trois avec la cuirasse. The whole profile of Carausius is represented, and the other two heads are conjugated; so the faces of William and Mary, both

regnant, appear in our own coinage. V. Hawkins, Franks, and Grueber, *Medalllic Illustrations of British History*, Vol. I, p. 659, No. 19, Pl. Busts of William and Mary face to face, 1689; Busts conjoined frequently, e.g., No. 90, Pl. *ibid.*, pp. 85-87, Nos. 49-54; Philip II. and Mary facing each other. Reverse, PAX AVGGG La Paix debout à gauche, tenant une branche d'olivier et un sceptre; dans le champ S.P.; à l'exergue C. (1042; de J.C. 289) *sp* Petit Bronze, 500 francs, *ibid.*, p. 1, une médaille très-remarquable. The abbreviation B appears to mean *Monumenta Britannica Historica*. This coin was published by Stukeley. Eckhel, *Doct. Num. Vet.*, Vol. VIII, Pars II, p. 43, satirises his work mentioned above, "Quis enim in eo viro non continuo Harduinum quendam Britannicum non agnoscat?"

The money issued by Allectus is less important, but we may remark that the galley is an appropriate device (Cohen, *ibid.*, pp. 43-52, Nos. 81-85, "Vaisseau à la voile avec ou sans rameurs"), as, like his predecessor Carausius, he doubtless commanded a numerous and formidable fleet.

Mommsen, because he is a great authority on epigraphy, also because he assures us that he copied the letters carefully (*descripsi diligenter*). He differs in many cases from the preceding editors, Gruter and Orelli¹; e.g., they both have, with one slight discrepancy, as the last line,

CVRANTE AVRELIO PROCVLO V.C. PROV. MAX. SEQ.

Proculus is not an uncommon name; it occurs on oculists' stamps and elsewhere.² We also find another form of it, Proclus. V.C. as an abbreviation has many meanings; here it would be = Viro Clarissimo. The end of the last line was probably Viro Perfectissimo PRAESIDE provinciae.

There seems to be no proof that the letters CVRANTE and C. PROV. MAX SEQ were cut on the stone. In one MS. the text ended with "*in Helvetiis*," which was expunged and "*Rhaetiae primae*" substituted in the margin; this again was expunged, and "*melius prov. Seq. Max.*" was written.³

The *Notitia* gives a general view of the civil and military administration of the Roman provinces as they existed after the subdivision made by Diocletian and Constantine. In it we find chapter xxxv, *Occidentis*, has for its heading *Dux provinciae Sequanici*, and officials under him are mentioned, e.g. *numerarius*, accountant; *commentariensis*, registrar; *subadjuva*, assistant; *excep-*

¹ Gruter, I, clxvi, No. 7, "Constantianae ad lacum Briganticum in S. Blasii sacello; nunc quidem et lapide et inscriptione mutilis, sed utroque adhuc integro, anno CIO.IO.XX." Cf. *ibid.*, No. 9, "Ex Onuph. Panu. et Petro Apiano."

Orelli, *Inscr. Lat. Collectio*, Vol. I, No. 467, s.r. VITODVRI, with the notes of Orelli and Hagenbuch. "Ex *Notitia Imp. Occid.*" p. 133a:—"Tribunus Cohortis Herculeae Panoniorum Arbore colligitur Arborem Felicem pertinuisse ad Raetiam provinciam. Ergo *Finis (Pfyn)* inter oppida Winterthur et Arbon fuit limes inter Sequanos et Raetos."

² My paper on "Touraine and the Central Pyrenees" in *Arch. Jour.*, 1888, XLV, 222. There is a short article on Proclus the physician in Smith's *Dictionary of Greek and Roman Biography and Mythology*, III, 538a. He was

probably a native of Rhegium, and flourished before Galen. In this compilation we find 10 who bore the name *Proclus*, and 19 under the heading *Proculus*. Sometimes both forms of the word are applied to the same person. Of all these Proclus the philosopher is the most celebrated.

³ For these details I am indebted to Theodore Mommsen's *Inscriptiones Confederationis Helveticae Latinae*, 1854. A copious list, pp. i-xviii, of *Auctores praecipue adhibiti*, is prefixed; it contains much information concerning their works, and may be consulted advantageously. Again, Mommsen's book has been supplemented by Swiss savants in the *Mittheilungen der Antiquarischen Gesellschaft in Zürich*. The *Inscr. Helveticae* have not yet appeared in the *Corpus*, but I am informed that Dr. Schneider is preparing an edition of them for that series.

tor, amanuensis or shorthand writer. Britain supplies an analogy with MAX SEQ., i.e. Maxima Sequanorum, for it was composed of the following provinces:—Maxima Caesariensis, Valentia, Britannia Prima, Britannia Secunda, and Flavia Caesariensis.¹

From this mutilated inscription we learn that when the Emperors Diocletian and Maximian held the Tribunician power, the former for the eleventh time and the latter for the tenth, and Constantius and Galerius were Cæsars, they repaired the Wall of Vitodurum from the ground, and that the governor of the province dedicated it to their honour.

Some persons might think the inscription at Constance so imperfect as scarcely to deserve attention, but if we compare it with another still more imperfect at Cologne, A.D. 295, we shall see that the one we have been considering supplies *lacunæ*, and makes the letters that remain to a great extent intelligible. I copy the latter from Brambach's *Inscriptiones Rhenanae, Regierungs-Bezirk Köln*.

IN H D · D
PRO SALVTE IMPP
DIOC///E////////T MAX!M
////A'GCC////////N////
////'IAXIN////////NOBB
///SS TE₁////MARTI
///L//TA^DTS V EVS////
///LAP^C//V///\ VP////V////
///CIM//ASOLO RESTI
////////////////////////////////\//OC
///////////////////////////////// 2

¹ The full title is *Notitia Dignitatum et Administrationum omnium tam civilium quam militarium in partibus Orientis et Occidentis*. Sir E. H. Bunbury, *History of Ancient Geography*, chap. xxxi, "Roman Writers after Ptolemy," Vol. II, p. 698 *seq.* See *Notit. Occid.*, edit., Böcking, 1839-1853, Pars prior, cap. xxxv, Dux Provinciae Sequanici, p. 104*, with an engraving that represents a fortified town from a MS. :—

[§ 1] Sub dispositione viri spectabilis ducis provinciae sequanici;

Milites Latavienses Olinone; and p. 105* [§ 2], Officium autem habet idem vir spectabilis Dux hoc modo: [1] Principem ex Officiis Magistrorum Militum Praesentalium a parte Peditum, etc. Pars posterior, Annotatio, pp. 811*-817*. p. 811, Utrunque vocabulum Latauienses et Olinone, quid significet inexploratum est. Here the text is corrupt, and several conjectures have been proposed, more or less plausible.

² *Op. citat.*, p. 107, No. 467, Inscripção restituta.

In epigraphy, as in other sciences, we must argue from the known to the unknown. So DIOCLETIAN^N nearly complete, explains the fragmentary characters DIOC, and the same remark applies to many other cases that occur in both these historical documents. Similarly RESTI is evidently a part of RESTITVIT, which we have *in extenso* on a rock at Pène d'Escot, near Oloron (Basses Pyrénées).

L VAL VERANVS GER
II VIR BIS HANC
VIAM RESTITVIT,

where II VIR stands for *duumvir* or *duovir*. This monument deserves to be cited for another reason, *viz.* as an example of the attention the Romans paid to keeping their roads in good repair; doubtless their chief object was to preserve the military communications throughout their vast empire (*v. Arch. Jour.*, XXXV, 9.)

Roman inscriptions are often very difficult to decipher, not only on account of the injuries which they have sustained, as we have already seen, but also because they abound in abbreviations, and the same initial letter may stand for many words that differ widely in meaning from each other.¹

Badenweiler is situated in the Schwarzwald, "in a vale retired," but easily accessible either from Strasburg or Constance. We cannot wonder that the Romans chose this favoured locality for a settlement; the genial climate, fertile soil and picturesque scenery would remind them of beautiful Italy, for a portion of it might seem to have been transported across the Alps.² On the other hand,

IN · H · D · D
PRO · SALVTE · IMPP
DIOCLETIANI · ET · MAXIMI
ANI · AVGG · CONSTANTI
ET · MAXIMIANI · NOBB ·
CAESS · TEMPLVM · MARTIS
MILITARIS · VETVSTATE · CO
NLA PSVM · AVR · SINTVS · PRÆF
leg · I · MPA · SOLO · RESTI
TVIT · DIE · XIII · KAL · OCT
TVSCO · M · ANVLINO · COS

p. Chr. 295.

¹ Gerrard, *Siglarium Romanum*, initial article for the letter C, which means *Cæcubum*, *Cæsar*, *Caius*, &c.;

upon voting tablets *condemno*; so A = *antiquo* in the Comitia, and *absolvo* in the courts of justice.

² *Chronik der Vogtei Badenweiler* by Dr. Gustav Wever, 1869, p. 3, note *, Justinus Kerner nennt Badenweiler in einem Gedichte "ein Stück Italiens auf deutschem Grunde." A list of authorities is prefixed to this *Chronicle*, p. vii, from Etschenreuter, 1571, to E. Ch. Martini, 1869. The series includes Philippus Cluver, 1616, one of the most important among the earlier geographers; J. D. Schöppflin, 1751, author of *Alsatia Illustrata, Celtica*,

the English tourist finds the place equally attractive ; he basks in brighter sunshine and surveys a more luxuriant vegetation than he left behind in the land which is his own. But besides the charms of external nature, the Roman baths, better preserved here than elsewhere in Germany, interest the antiquary as a subject for investigation that will stimulate curiosity and exercise ingenuity, suggesting problems by no means easy to solve.

The remains of walls for the most part do not exceed 8 feet in height, hence the structure above ground cannot be compared with the baths at Rome or Pompeii ; but the accumulation of rubbish, consequent on the destruction of the building by the barbarians, for centuries protected the lower part of it, so that the ground plan can be clearly traced. Its overthrow took place probably in the beginning of the fifth century, when the Germans not only invaded but ravaged the empire, when peace and prosperity disappeared, plunder and desolation universally prevailed. Salvianus in his treatise *De Gubernatione Dei* bears witness to the disastrous change,¹ and his evidence becomes more striking if we compare this work with the writings of Ausonius, who flourished about a hundred years earlier.² During the middle ages no mention of the monument was made by any author or chronicler ; it was uncovered only in 1784, and a description of it was published by Gmelin in the following

Romana, Francica, folio, Colmar, 1751 ; and C. L. Wieland, 1811, a celebrated writer, too well known to need description here.

¹ Salvianus lived from about 420 A.D. to the close of the fifth century. In his melancholy work, entitled, *De Providentia sive De Gubernatione Dei et de Justo Dei præsentique Judicio Libri*, the author enlarges on the misery caused by barbarian inroads. The line of argument may be compared with the treatment of the same subject by Augustine in his *De Civitate Dei*. The article "Salvianus" in the *Encyclopædia Britannica*, ninth edition, is very superior to that in Smith's *Dictionary of Biography and Mythology* ; the former contains a good summary of the contents of the *De Gubernatione* and *Adversus Avaritiam ad Ecclesiam*, concluding with a bibliographical notice of the editions and manuscripts.

² Ausonius, about 310-394 A.D., was born under Constantine the Great, and died under Theodosius the First. His poems leave on the reader's mind a pleasing impression of a comparatively happy period. See especially "*Claræ Urbes*," "the praises of fourteen illustrious cities."

In the Delphin edition, 1730, pp. 209-226, "*Ordo nobilium urbium*" begins with Rome and ends with a mention of Divona (Cahors) :—

"Divona Celtarum lingua, fons addite Divis,"

under the heading Eurdigala (Bordeaux). The edition of C. Schenkl, 4to., 1883, contains no explanatory commentary, but passages of earlier writers imitated, various readings, and Indices I Scriptorum, II Nominum et Rerum, III Grammaticæ, Elocutionis, Rei Metricæ.

year, with a valuable copper-plate showing the ground plan and section. The baths were evidently divided into two nearly equal parts, which led to the conjecture that one was intended for the army and the other for civilians; but the absence of any traces of military occupation, such as were found in other places, has caused this supposition to be abandoned. It seems almost certain that here separate apartments were provided for the male and female sexes. Promiscuous bathing was practised, as we know from Martial's epigrams; on the other hand, the Emperors issued edicts to check it.¹

The site of this establishment was well chosen, for a high hill (the Schlossberg) sheltered it from the west wind, which would blow with great violence across the broad valley of the Rhine. Its façade looked towards the north, and here fore-courts, probably surrounded by porticoes, accommodated visitors who promenaded (*ambulatio*) or engaged in gymnastic exercises; the walls were not so thick as in the great halls, whence we may infer that there was less height to support—a

¹ Overbeck, *Pompei*, Vol. I. ii, 3, "Die öffentlichen Gebäude," fünfter Abschnitt, "Die Thermen," p. 189, Figur 138, "Plan der älteren Bäder"; p. 202, "Getrennt von dem beschriebenen Männerbad liegt das . . . Frauenbad, welches unser Plan durch dunkle Schraffirung unterscheidet, und welches dieselben Räumlichkeiten in grösserer Beschränkung enthält"; Fig. 145, "Ansicht des Frauenbades."

Vitruvius De Architectura, edit. Rode, Lib. V, cap. X, "Et item est animadvertendum, uti caldaria muliebria viriliaque conjuncta, et in eisdem regionibus sint collocata, sic enim efficitur, ut in vasariis et hypocaustis communis sit usus eorum utriusque." *Atlas of Plates*, Lib. V, Forma XVIII, "Die römischen Bäder in der Markgrafschaft Baden zu Badenweiler." Vitruvius flourished in the Augustan age. This passage implies that men and women had separate apartments for bathing at that period. Daremberg et Saglio, *Dictionnaire des Antiquités Grecques et Romaines*, tome I, Première Partie, p. 661, Fig. 766, "Il est facile d'y reconnaître, comme nous l'avons vu à Pompéi, un établissement pour les femmes placé à côté de celui des hommes. Les bains de Baden-

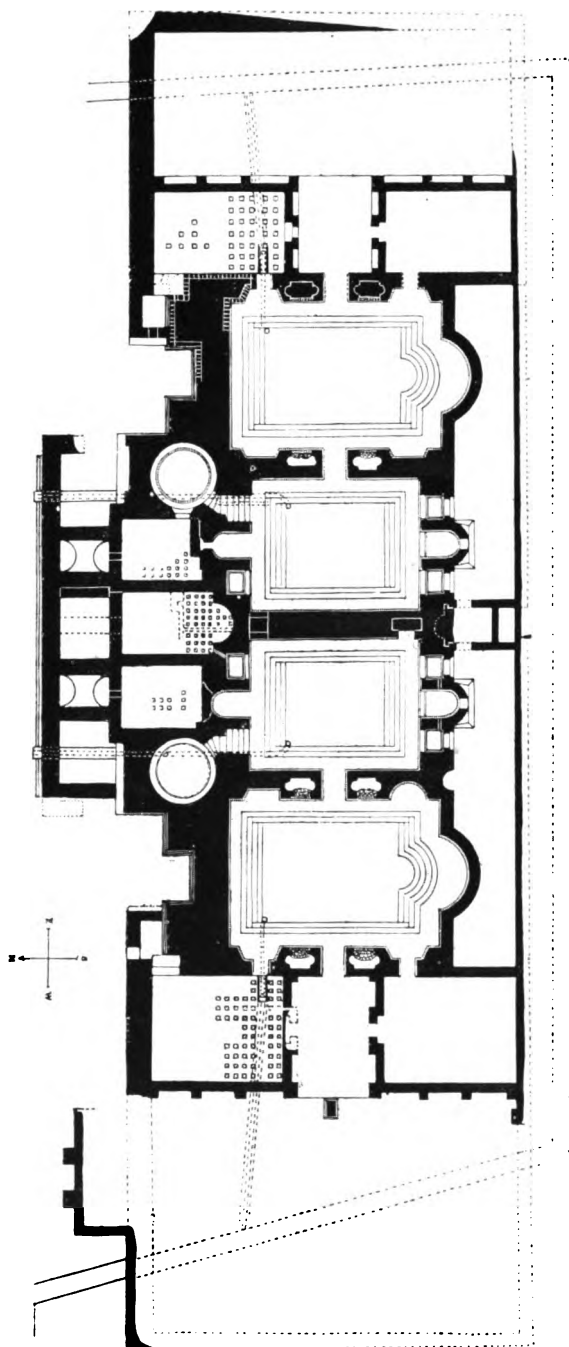
weiler dans la Forêt-Noire, offrent un exemple remarquable d'une pareille ordonnance." References in footnote 209.

Spartianus, *Vita Hadriani*, cap. 18, "Lavacra pro sexibus separavit." Here Casaubon has a learned note, reprinted in the *Augustan History*, I, 174. Cap. tolinus, *Marcus Antoninus Philosophus*, cap. 23, "Lavacra mixta submovit." Lampridius, *Alexander Severus*, cap. 24, "Balnea mixta Romae exhiberi prohibuit: quod quidem jam ante prohibitum . . . Heliogabalus permiserat." Pliny, *H. N.*, XXXIII, § 153. "Mulierum . . . cum viris lavantium."

This indecent practice prevailed in Christian times and even among ecclesiastics. Ilege synodi Πειθικτης . . . πρό της συνόδου ταύτης ἐπιρριμένοι τινες καὶ μοναχοί, καὶ λαϊκοὶ μετὰ γυναικῶν ἐλούοντο. Casaubon, *loc. citat.*

J. Marquardt, *Das Privatleben der Römer*, erster Theil, p. 282 seq., and note 1, p. 283, besides other authorities cites a decree of the Council at Laodicea, "Die mixta balnea bis tief in die christlichen Zeiten hinein sich erhalten und ein fortwährendes und doch nie wirksames Einschreiten weltlicher und geistlicher Behörden erfordert haben."

PLAN OF ROMAN BATHS AT BADENWEILER.



gradation which would produce a pleasing architectural effect. A central hall (*vestibulum*), flanked by two spacious rooms, led to the interior of the building; close to this hall stood an altar dedicated to the goddess who presided over the Schwarzwald, still bearing the inscription
 DIANAF//
 ABNOB// i.e. *Dianae Abnobae*.¹ On the east side of the so-called *Frigidarium*, with an opening into it, were the *Apodyterium* or undressing room, and hypocaust, in which the ceiling (*suspensura*) was supported by short pillars (as at Corinium)²; they were standing when the baths were discovered, and are represented in Gmelin's plate. It is reasonable to suppose that above the hypocaust was a sweating-room, or a *cella tepidaria*, where the bathers anointed (*Elaothesium* or *Uctorium*) and shaved themselves. The middle wall, to which reference has already been made, divided the baths into two groups, each consisting of a larger and smaller hall. A similar separation appears in a vignette at the end of Leibnitz's book (*Die Römischen Bäder bei Badenweiler im Schwarzwald*); it is copied from

¹ Tacitus, tracing the course of the Danube, says that it rises in a part of Mount Abnoba, where there is a gentle ascent, "molli et clementer edito . . . jugo" (*Germania*, cap. I). The phrase seems imitated from Virgil, *Eclagues*, IX, 7,

"Qua se subducere colles
 Incipiunt, mollique jugum demittere
 clivo."

How attentively the historian had read the poet, appears from many other passages.

Pliny, *Hist. Nat.*, IV, xii, 79, defines the geographical position of the source of the river. "Ex adverso Raurici Galliae oppidi." We find the same form of the word in *Ptolemy*, II, ix, 9, Ἀργόιστα Παρρικῶν. The notes in the edition of Car. Müller supply references. The epitaph of Munatius Plancus near Gaeta, ends with the words:

"IN GALLIA COLONIAS DE-
 DVXIT.
 LVGDVNVMETRAVRICAM."
Orelli, No. 590.

See especially *Mittheilungen der Historischen und Antiquarischen Gesellschaft zu Basel*, Neue Folge II. *Das römische Theater zu Augusta Raurica*,

von Th. Burckhardt-Biedermann, mit 5 Abbildungen, 4to, 1882; also my paper on "Roman Antiquities in Switzerland," *Arch. Jour.*, 1885, XLII, 196, with engraving. *Cæsar's Gallic War* has Rauraci, Book I, Chap. 5, vii, 75. This tribe joined the Helvetii in their invasion of Gaul, and is also mentioned amongst the allies of Vercingetorix when he made a supreme effort to shake off the Roman yoke.

Ploteny, II, xi, 11, gives the name Abnoba in the plural number, which is appropriate because it denotes a range of mountains. Πάλιν ἀπ' ἀνατολῶν μὲν τῶν Ἀβνοβαίων ὁρίων οἰκοῦσιν ἐπὶ τοῖς Συήβοις Κασσάριοι.

² Buckman and Newmarch, *Remains of Roman Art in Cirencester (Corinium)*, p. 63, *Suspensurae* are floors elevated above the level of the ground, generally upon a number of small supports or pillars (*pilae*); p. 64, woodcut section of the *pilae* in the room B. They are composed of bricks and squared blocks of stone. Plate VIII shows the position of the *pilae* of the floor A. Compare p. 66, woodcut 8, plan of *pilae* of Room A.

an ancient picture engraved for the first time by Bellori in his *Fragmenta veteris Romae*.¹ Underneath the building are inscribed the words AQVAE PENSILES, which seem to mean hot baths upon *suspensurae*.²

The larger hall had a semi-circular apse; it was 55 feet long, 30 feet broad, with a basin 5 feet deep (*natatio*), supplied from natural springs southward at the foot of the hill, so that the water must have entered on that side. It passed into both *frigidaria* by an underground leaden pipe 18 feet long, 8 inches in diameter,³ and was carried off by a drain in an oblique direction under the hypocaust

¹ The title *in extenso* is *Fragmenta vestigii veteris Romae ex lapidibus farnesianis, nunc primum in lucem edita, cum notis Bellorii*, Romae, 1673, in fol. This work must not be confounded with *Admiranda romanorum antiquit. ac veteris sculpturae vestigia*, a P. Sante Bartolo del. et incisa, notis Jo-P. Bellorii illustrata.

² We read in Pliny, *Hist. Nat.*, XIX, v, § 64, "Cucumis . . . pensiles eorum hortos (movable frames) promonentibus in solem rotis olitoribus; campae portatili da agrumi. Cf. Columella, Lib. XI, Cap. III med., § 53, "Hac ratione fere toto anno Tiberio Caesari cucumis praebebat. Compare Pliny, *H. N.*, XXXVI, xii, § 18, "Hicidem architectus (Sostratus Cnidius) primus omnium pensilem ambulationem Cnidi fecisse traditur," where *ambulatio* means a place for walking, as *cenatio* in Juvenal, VII, 183, is a dining-room. Sostratus built the Pharos of Alexandria for Ptolemy Soter, at an expense of 800 talents. *Caesar De Bello Civili*, III, 112, "Magna altitudine, mirificis operibus exstructa." Hirt, *Geschichte der Baukunst*, II, 160, "schwebende Spaziergang." Donaldson, *Architectura Numismatica*, Plate 92, engraving of a medal showing the lighthouse with inscription, LH, which has been interpreted as indicating the eighth year of the reign of Antoninus Pius, named in the legend of the obverse. L is supposed to be the initial letter of *Λυκδᾶστρος*, genitive of *Λυκδᾶς*, the year, probably from the same root as the Latin *lux*, and *saivw*, the sun's course; however, this explanation may be disputed. H in the Greek alphabet, used as a numeral, stands for 8. Pharos is described *ibid.*, pp. 345-349; Sillig, *Catalogus Artificum*, pp. 426-428, where a list is given of four artists bearing this name.

In late writers we read of *Pensiles Horti*, hanging gardens, at Babylon, but as there is no early record of them, it seems doubtful whether they ever existed there.

The silence of Herodotus on this subject is the more noteworthy, as in the course of his travels he visited Babylon—*ipse testatur*, Baehr's edition of the author, IV, 394, *Commentatio de Vita et Scriptis Herodoti*, and Rawlinson's *Translation*, I, chap. II, 67, note 2. Moreover, the inscribed bricks of the great King Nebuchadnezzar (cited in Dr. Driver's *Essay on Hebrew Authority*) commemorate many edifices which he erected at Babylon, but no mention is made of hanging gardens (*Authority and Archaeology, Sacred and Profane*, edited by D. G. Hogarth, 1899, p. 120 *seq.*).

³ This leaden pipe at Badenweiler reminds me of one found at Chester, in October, 1899. It is inscribed as follows:—

IMP. VESP. VIII T. IMP. VII. COS
CN. JVLIO AGRICOLA LEG.
AVG. PR. PR.

Expansion.

"Imperatore Vespasiano VIII. Tito Imperatore VII. Consulibus Cnaeo Julio Agricola Legato Augusti Propratore."

This date synchronizes with A.D. 79, in which the eruption of Vesuvius took place, that overwhelmed Herculaneum and Pompeii. The inscription is specially interesting because it is the only one yet discovered bearing the name of Agricola, who governed Britain A.D. 78-85, made famous by Tacitus, his son-in-law and biographer (*Proceedings of the Society of Antiquaries*, Feb. 15, 1900, Second Series, XVIII, 97 *seq.*, with illustration).

(marked by dotted lines derived by Leibnitz from Gmelin's plan); this channel, arched and underground, was continued along the south side of the edifice, and besides receiving the bath-water, removed the moisture from the springs that penetrated the soil, and thus preserved the solidity of the foundations. On both sides of the *frigidarium* recesses were hollowed out in the thick walls, rectangular, having semi-circular niches at both ends, with a coloured dado, and 6 or 7 feet high; perhaps they were waiting-rooms (*Scholae*).¹ They are at present filled up with Roman masonry; hence, as in other parts of the building, we have proof of a change made before the destruction by the barbarians.

The so-called *Tepidarium* was somewhat smaller, 40 feet long, 32 feet broad, and the bath, as in the larger room, was quadrangular. At the south end were three separate baths (*solia*) in niches, which received light from broad perforations in the wall at the back. The analogy of similar buildings at Pompeii and the greater thickness of the walls lead to the conclusion that the larger halls were covered by a semi-cylindrical roof. Five rooms in front appear to have been *caldaria* or *Laconica* provided with sweating-baths (*sudationes*), hypocausts, a movable cover under an opening in the roof (*clipeus*) to regulate the heat,² and reservoirs of cold and hot water

¹ Marquardt, *Privatleben der Römer*, I, 287: "Das *Labrum* stand in einer halbrunden Nische (*schola*); um dasselbe war ein Umgang gelassen, in welchem ausser den sich Waschenden auch die auf den Zutritt Wartenden Platz fanden." Note 1, "*Locum in balneis occupare*, sich zudrängen." Tertullian *adversus Marcionem*, III, 2, ed. Oehler, II, 124, "Eine sprüchwörtliche Redensart" (proverbial saying). The Greek word *σχολή* signifies leisure, also a place for leisure and learned leisure; the Latin *ludus* somewhat resembles it in both the primary and secondary meanings. Vitruvius, Lib. V, cap. 10, "Scholas autem laborum ita fieri oportet spatiosas, ut cum priores occupaverint loca, circumspectantes reliqui stare possint (*Lexicon Vitruvianum*, s.v. p. 59, edit. Rode, 1800).

² See the Catalogue of Greek Sculpture in the British Museum. *Reliefs exhibiting Scenes of Domestic Life*,

I, 311, No. 629 is a sepulchral monument of Jason, a physician. . . . He sits on a stool. Before him stands a boy undergoing examination. . . . On the right is a vessel of peculiar form, resembling a cupping glass, but this it cannot be on account of its great size, at least eight times as large as the man's head, and therefore out of all proportion to the group. Probably this bell-shaped object represents the *clipeus* (shield) or cover of the opening in the roof of the bath. I observed on the stone a curved line perhaps intended for the chain by which this cover was worked, so as to leave it open or shut according to the temperature required—Cf. *The Medical Magazine*, April, 1893, "Medical Epigraphs of the British Museum," by J. Keser, M.D., pp. 907–920, especially p. 913 sq. Marquardt, I, 291, "Unter dieser Oeffnung hängt eine eherner Scheibe (*clipeus*) an Ketten," etc.

If this interpretation is correct, the

for washing. There were doubtless passages from the hypocausts to the rotundas, and again from the latter to the tepidarium. Leibnitz supposes that water was admitted into these round chambers, and that two pipes found there, one of lead in the eastern basin, the other of clay in the western, were used to carry off the water by which the tepidarium or hypocaust might otherwise be flooded; but this explanation is doubtful. A small annexe leans against the south end of the great middle partition, and connects the establishment with the long enclosing wall. It was divided into two unequal parts, and according to Gmelin terminated in a semi-circular apse; and on the east and west sides were small rooms, perhaps intended for the use of the attendants; they probably had doors as a back entrance into the building.

Leibnitz has prefixed to his work a vignette of a painting said to have been discovered in the *Thermae of Titus at Rome*, which represents ancient baths with inscriptions over the compartments—*ELAEOTHES¹ FRIGIDARIIV TEPIDARIIV CONC. SVDATIO BALNEVM*, etc. It has often been quoted as an authority, but is now admitted to be modern. Canina in his *Architettura Antica*, III, pt. ii, 508, maintained that there

physician is represented as prescribing baths for his young patient, so that we have here in sculpture a commentary on Celsus, who gives many directions for this treatment as promoting health and curing disease, e.g. *De Medicinâ*, Lib. I, cap. III, p. 25, edit. Bipont: "Si quis vero exustus in sole est, huic in balneum protinus eundem perfundendumque oleo corpus et caput; deinde in solium bene calidum descendendum est, tum multa aqua per caput infundenda, prius calida, deinde frigida. *Ibid.*, cap. IV, p. 32, et cap. XVII, pp. 87-89: "At balnei duplex usus est. Nam modo discussis febribus, initium cibi plenioris, vinique firmioris valetudini facit; modo febrem ipsam tollit," etc.

¹ In Greek *Ἐλαοθήσιον*, the room where oils and unguents were kept, and the bathers rubbed and anointed. Vitruvius, v. 11: "De palæstrarum ædificatione. Ad sinistram ephæbei elæothesium." Frequent allusion to this practice occurring in Celsus will account for the mention of oil in some inscriptions as forming part of *congiaria*

or distributions of largesses to the people. See my paper on "The Gallo-Roman Museum of Sens," *Arch. Jour.*, LVI, 224, 355-361, especially the last four pages; *Mémoires des Antiquaires de France*, sixième série, tome quatrième, "Inscriptions Antiques de la Quatrième Lyonnaise," P. Arnaudet, pp. 103-107; *ibid.*, tome cinquième, "Une Façade dans la Capitale des Senones," G. Julliot, p. 142 *seq.*

Compare the folio Atlas of Plates appended to Rode's edition of Vitruvius, with brief explanations in Latin and German. Forma XVIII, "Balneæ seu thermæ Romanæ prope Badenweiler (in der Markgrafschaft Baden) C. 1, 2, Uinctuaria s. Elæothesia (Salbezimmer) Uinctorium, sc. cubiculum" corresponds exactly with the Greek *ἐλεοθήσιον* (*ἐλεῖψω*). Plinius Junior, *Epp.* II, 17, med. § 11: "Adjacet unctorium, hypocaustum, adjacet propigneon balinei." *προπνεύσιον* means the mouth of the furnace, pure Latin *præfurnium*.

was no proof of its being genuine, and that it was a drawing made by some commentator on Vitruvius.¹

The date of the erection of these baths at Badenweiler is uncertain, because architecture, observing fixed rules and proportions, continued for a long period with very little alteration, while sculpture, requiring more genius and invention, rapidly deteriorated. Hence, some writers have assigned the edifice to Trajan's reign, and others to Diocletian's. The Antonine age seems more probable, as the Roman possession of the Decumates Agri was comparatively of short duration, lasting only about 100 years.² Here we must have recourse to conjecture, and it is by no means unlikely that the baths were the work of Hadrian. That great administrator travelled over every part of his dominions, and conferred substantial benefits wherever he went. Moreover, he may have taken a more active part than is generally supposed in strengthening the defences on the northern frontiers of the empire.³

¹ Marquardt, *Privateleben der Römer*, Vol. I, pp. 277-279, "Angeblich (pretended) antikes Bild eines röm. Bades." This representation of an ancient bath first appeared as an illustration on the title-page of a book published in the year 1553; its history is given in detail by Marquardt. Canina, *loc. cit.*: "Nessuna prova si accenna che faccia conoscere essere stato veramente un tale dipinto rinvenuto nelle designate terme e che lo dimostri essere opera antica." The supposed fresco has been accepted as an original authority and reproduced, sometimes with alterations, by several generations of scholars, amongst them by Rode in his edition of *Vitruvius*, and by Rich in his *Companion to the Latin Dictionary*.

² The *Decumates Agri*, title lands, were so called because the occupiers paid a tenth of the produce to the Roman government. This country was situated in the angle formed by the Upper Rhine and the Danube. Roman remains are comparatively few in this region, but the Museums of Karlsruhe and Stuttgart testify that many interesting objects have been found recently. Tacitus, *Germania*, cap. 29: "Mox limite acto promotisque praesidiis sinus imperii et pars provinciae habentur," and Orelli *in loco*. Merivale, *History of the Romans under the Empire*, octavo edition, Vol. VII, p. 216.

³ It seems highly probable that Hadrian took a part in constructing the boundary that protected the settlers from the attacks of barbarians. Spartianus, his biographer, chap. 12, § 6, gives us some information that favours this supposition: "Per ea tempora et alias frequenter in plurimis locis, in quibus barbari non fluminibus sed limitibus dividuntur, stipitibus magnis in modum muralis saepis funditus jactis atque conexis barbaros separavit." The next sentence begins with "Germanis regem constituit." See the long and learned note of Casaubon reprinted in the edition of the *Augustan History*, Lugduni Batav., 1671, I, 113 sq. He refers to Tacitus, *Annals*, I, 50, "Romanus . . . castra in limite locat, frontem ac tergum vallo, latera concaedibus munitis" (barricade of felled trees), and mentions the repair of frontier cities and fortresses by Diocletian. Dr. Hodgkin has called attention to the importance of the passage quoted above from Spartianus in his essay entitled "Pfalzgraben," contributed to *Archæologia Aeliana*, 48. It is accompanied by a sketch map of the Limes Imperii Romani, between the Danube and the Rhine (*ibid.*, p. 4).

Hadrian travelled through all the provinces of his vast dominion—from the sultry plains of Egypt to the snowy hills of Caledonia—and conferred

Though many of the details cannot be explained satisfactorily, these baths are important, because, as I have already remarked, they are better preserved than any other buildings of the same class in Germany. Next to them I should place the *Thermae* of Trèves, at St. Barbara, near the Moselle; a plan has been published separately, as well as in the recent work of Arendt, *Das Monumentale Trier*.¹ Many small objects found at Badenweiler have been deposited in the museum at Karlsruhe.² I am sure that the antiquarian traveller who wishes to examine them, will meet with every attention from Professor Schumacher, the assistant director. The baths have been roofed over so that they present an appearance very different from the elevation as given in the plates of Leibnitz. By this means the place has been made so dark that I presume it would be difficult to take good photographs of the apartments.

I now proceed to make a few remarks on the Roman boundary wall. Our own countrymen have contributed their share towards the elucidation of this interesting subject. The late Mr. James Yates read a paper on the *Limes Transrhenanus* at the Newcastle Meeting of the Archæological Institute. After an interval of many years, Dr. Hodgkin published an elaborate memoir entitled the *Pfahlgraben*, about eighty pages of text, with

benefits on the inhabitants whithersoever he went. We may remark that a ruler so wise and so indefatigable would scarcely neglect the defence of the *Decumates Agri*, which were exposed to German incursions. Another argument for applying to the *Limes Transrhenanus* the words of Spartianus quoted above is derived from the fact that about A.D. 120 he caused to be built a boundary-wall in our own country, from Pons Ælii (Newcastle-upon-Tyne) to Luguvallium (Carlisle). Spartianus, *ibid.*, chapter 11: "Multa correxit murumque per octoginta milia passuum primus duxit, qui barbaros Romanosque divideret."

¹ *Das monumentale Trier von der Römerzeit bis auf unsere Tage in Wort und Bild vorgeführt*, von K. Arendt, Staats-Architect in Luxemburg, 1892, folio.

Tafel II, Fig. 1. Erläuterter Grundriss der Thermen in St. Barbara.

2 und 3. Ansicht der Ruinen derselben im 17. Jahrhundert.

4. Ansicht der Ruinen nach den letzten Ausgrabungen.

5. Ansicht eines unterirdischen Ganges.

6a. Der in den Bäderruinen ausgegrabene Amazonen-Torso.

6b. Kopf eines Diadumenes.

6c. Arzt-Stempel für Balsamstäbchen.

6d. Kamm und Haarnadeln aus dem Frauenbad.

7. Fragment eines römischen Schiffes, Steinrelief (Museum).

² *Grossherzogliche Vereinigte Sammlungen zu Karlsruhe. Beschreibung der Sammlung antiker Bronzen*, von Karl Schumacher, mit zahlreichen Abbildungen in Text, 16 zinkographischen und 13 Lichtdrucktafeln, 1890. This catalogue has been carefully compiled and copiously illustrated, but I do not find in it any mention of bronzes from Badenweiler.

many maps and other illustrations. In 1884 Colonel Von Cohausen's book appeared, *Der Römische Grenzwall in Deutschland; Militärische und technische Beschreibung desselben*. It is accompanied by an atlas of fifty-two plates.¹ But the work of exploration has been undertaken again, and at the present time is being carried out vigorously. Portions of it are distributed amongst the German *savants*; in some cases I can from personal acquaintance bear testimony to their kindness, learning and industry.

Among the forts on this wall, that called the *Saalburg* deserves attention more than any other. Professor Herzog, of Tübingen University, informs me that it has been described very exactly and with a masterly hand by L. Jacobi in his work, *Das Römerkastell Saalburg bei Homburg vor der Höhe*, 1897, and that the book is specially instructive for the type of a *Kastell*.² The German Emperor intends to restore the *praetorium* and

¹ Taf. I, "Der römische Grenzwall von der Donau bis zum Rhein. Die britischen Römerwälle, Vallum Pii, Vallum Hadriani." Some of the illustrations are derived from Trajan's Column at Rome. Taf. II, Fig. 2, "Dazische Mauern, Trajans-Säule." Taf. III, Figs. 4-8, "Darstellungen auf der Trajanssäule." Taf. XIII, XIV, "Saalburg."

² This important work was preceded by *Das Römerkastell Saalburg*, von A. v. Cohausen, Oberst z. D. und Conservator und L. Jacobi, Baumeister, pp. 61, with two plates, a small and unpretending brochure, which, however, contains much information. The latter part of it is devoted to the Saalburg Museum in Homburg, pp. 42-61. "Die Fundstücke, Inschriftsteine und Bildwerke, Ziegel, Gläser, Gegenstände aus Eisen, die Bronzefundstücke, Münzen."

I have not found in Baumeister's elaborate treatise any notice of the *armamentarium* (arsenal), which one would suppose must have been required for storage of arms in the *castra stativa* (permanent camps), and I presume that there has been difficulty of identifying it with any site in particular. At Pola four angular towers at regular intervals project outside the circumference of the amphitheatre. . . . The late Sir Richard Burton suggested that they might have been *hoplothecae*, armouries for the

gladiators (*Arch. Jour.*, XLIX, 255, with illustration from a photograph). Jacobi's book is a large 8vo. volume, pp. 608, it contains 110 engravings intercalated in the text, with a map ("Karte der Saalburg und Umgegend," including Homburg and Frankfurt) and 80 full page plates.

The arsenal is mentioned in *Inscriptions*, Gruter, Pag. C, 7, EX. DECVRIA. ARMAMENTARIA (an adjective omitted in ordinary Latin dictionaries); *ibid.*, Pag. CLXIX, 1 Apud Bataros, loco nunc appellato à Cattorum vico Catwyck . . . ad vetus ostium Rheni.

ARMA MENTARIVM VETVSTATE CONLA BSV M RESTITVERVNT.

In the original ligatures occur. For examples *vide* Akerman, *Numismatic Manual*, Plate IV, at the end of the volume. Orelli gives a similar inscription, No. 975, in *Anglia*.

Compare Juvenal, *Satire* XIII, 82 *seq.* :—

"Addit et Herculeos arcus hastamque Minervae,
Quidquid habent telorum armamenta cæli."

("And every weapon that, to vengeance given,
Stores the tremendous magazine of heaven.")

Gifford's Translation.)

the *porta decumana*, and to place in the former the future museum of the *Limes*.

The results of investigations have been made known by a series of monographs, one for each *Kastell*. They are parts of a great work entitled *Der Obergerm.-Raet. Limes des Römerreiches im Auftrage der Reichs-Limes-Kommission herausgegeben von dem Militärischen und dem Archäologischen Dirigenten, O. von Sarwey, General-lieutenant z.d., F. Hettner, Museumsdirector*. I have selected three of these separate papers—"Osterburken," "Öhringen," and "Unterböbingen."

At Osterburken incomparably the most remarkable object brought to light is a Mithras relief, now deposited in the Altertumshalle at Karlsruhe. It was found in the spring of 1861, in a cellar 9 feet underground, close to a bridge over the Kirnach, not far from the railway station. In the Mithræa as yet known an *apsis* or *exedra* has not been met with, but it occurs in inscriptions No. 256 (*signum numinis cum absidata*), No. 239 (*cryptam cum porticibus et apparatorio et exedra*).¹ The discovery of a spring of water is interesting; I suppose it was used for ablutions and purifications. The tablet ranks among the first of its class for size (being 1.70 mètre in height and breadth), for Mithraic legends, mysterious deities and the union of Persian, Greek and Chaldean elements.²

¹ *Apparatorium* appears only in inscriptions. "Locus prope sepulcrum muro circumdatus ac tectus, ad lustrationem sepulcri et caenas anniversarias funebres inter propinquos amicosque celebrandas," De Vit., *Lexicon*, s.v. Raphael Fabretti, *Inscriptions*, A.D. 1699, p. 232, Nos. 609-611, with a commentary. Gloss. Vet. ἑξαπτήριον ab ἑξαπτήρ, *apparo, instruo*. In one inscription mention is made of a banquet and purification, but not of a tomb.

Exedra (Greek, ἑξήδρα), on the other hand, is a word which occurs sometimes in the authors usually read. Cicero, *De Oratore*, III, 17: "In eam exedram venisse, in qua Crassus positio lectulo recubisset"; v. Ellendt's edition, *Explicationes*, II, 357. He cites Vitruvius, V, 11, int., p. 120, edit. Rode: "Constituuntur in tribus porticibus exedrae spatiosae habentes sedes, in quibus philosophi rhetores reliquique, qui studiis delectantur, sedere possint,"

and distinguishes these apartments from *hemicyclia*. Cf. Cicero, *De Natura Deorum*, I, 6. Marquardt, *Privatleben der Römer*, zweite Auflage, 1886, p. 249, note 6, "*Exedra* ist ursprünglich ein in einer Säulenhalle nach innen hin ausgebauter Sitzplatz." *Dictionary of Antiquities*, third edition, I, 281, plan of *Thermae* of Caracalla; FF half-circular alcoves, in which there were seats for the philosophers to hold their conversations. The same plan is given by Rich, *op. citat.*, but the *exedrae* are marked with the letters E E, p. 657 seq., s.v. *Thermae*. The numbers of the inscriptions quoted in the text are derived from Fr. Cumont, *vide infra*, list of references at the end of the Appendix.

² From the writings of the Christian Fathers we know how extensive was the spread of Mithraism, and I have in a paper on "Roman Antiquities of the Middle Rhine," *Arch. Jour.*, XLVII, 379, note 1, quoted Tertullian *De*



MITHRAS AND BULL, FROM OSTERBURKEN.

The central group, of large dimensions, consists of Mithras killing a bull, and fills the greater part of the niche ; he is in the usual attitude, as we see him at the British Museum. The bull in mortal agony draws back his fore-leg and extends his tail upwards. From it three ears of corn are sprouting, perhaps to indicate the fertilising influence of the sun-god, causing vegetation to rise up out of the earth. Mithras looks back towards a raven, the messenger of Apollo ; again there may be an allusion to the sun, with whom Apollo was identified. Under the bull a vase, snake and lion are said to symbolise the strife of the elements. On each side of the chief group stands a torch-bearer, dressed like Mithras, compare *τριπλάσιος Μίθρας* in inscriptions ; so that some kind of trinity seems to be represented. These figures may have reference to the seasons, of which in the old Greek mythology there were only three. The signs of the Zodiac occupy the border over the niche, and may be traced to Chaldæan influence ; immediately above them we see an assemblage of Olympian deities.

In the middle of the lower row, Jupiter is enthroned ; Apollo, Mars and Hercules stand on his right ; Juno, Minerva and Venus correspond with them on his left. Minerva with her attributes, helmet, shield and lance, is easily distinguishable. In the upper row, Victory behind

Praescriptione haereticorum, cap. XL, "Multae leges et regulae ponuntur, quas catholici cum haereticis agentes servare debent," as proving the fact. This author flourished under Septimius Severus and Caracalla, and I now add earlier evidence from Justin Martyr, who presented his *Apologia* to the Emperor Antoninus Pius, probably about A.D. 171, edit. Benedictine, p. 83. After explaining the doctrine of the Eucharist, he proceeds : "ὅτι καὶ ἐν τοῖς τοῦ Μίθρα μυστηρίοις παρίδωκαν γίνεσθαι μιμησάμενοι οἱ πονηροὶ δαίμονες, ὅτι γὰρ ἄρτος καὶ ποτήριον ὕδατος τίθεται ἐν ταῖς τοῦ μυουμένου τελεταῖς μετ' ἐπιλόγων τινῶν ἢ ἐκίστασθαι, ἢ μαθῆναι δύνασθαι." ("Atque id quidem et in Mithrae mysteriis ut fieret, pravi daemones imitati docuerunt. Nam panem et poculum aquae in ejus qui initiatur mysteriis, quibusdam verbis additis apponi, aut scitis aut discere potestis.)

Index Rerum, p. 634, s.v. Mithras. "Mithrae sacerdotes dicunt illum ex petra genitum." 168b. "Speluncam vocant locum ubi ab eo initiari dicunt qui ei credunt," *ibid.* . . . "illuc a diabolo inventa ut vaticinium Esaiæ imitaretur," 175c.

We may consider the Chaldæan symbols as illustrating Juvenal, *Satire* X, 92-94,

"Tutor haberi
Principis angustâ Caprearum in
rupe sedentis
Cum grege Chaldaeo ?"

("And keep a prince in ward, retired
to reign

O'er Caprea's crags, with his
Chaldæan train ?")

Gifford's *Translation*, with notes.)

ὁ Τιβέριος ἐμπειρότατος διὰ τῶν ἀστρῶν
μαντικῆς ἦν. *Dio*, LVIII. Suetonius,
Tiberius, chaps. 14 and 69. Rupert's
Commentary on Juvenal, in loco.

Jupiter holds a large palm-branch; the other personages are so much injured that we can hardly identify them.

On the left hand in the upper corner, the sun, nimbated, with flying drapery, drives a quadriga; over him hovers the morning star, holding torches. To right, the moon, who has a large crescent over her head, in a chariot drawn by two oxen, descends into the darkness of a cave, while the evening star, also holding torches, falls down from heaven.

The groups on the pillars are much mutilated, but beginning with the lowest on the left, proceeding upwards and then downwards along the right pillar, we may remark a head in a rosette; Earth and Atlas, the latter supporting a globe; the three Fates; Kronos (Saturn) handing over to Jupiter the thunderbolt, emblem of dominion over the world; and Jupiter contending with a giant.¹ In the left upper corner the birth and deeds of Mithras are the subject, and the most conspicuous figure is a youth, wearing the Persian cap as before, who is cutting leaves or flowers from a great tree. In the right upper corner the bull appears twice, alone and carried by Mithras on his back. At the top of the right pillar, Mithras draws water from a rock by striking it with an arrow;² one Asiatic stretches out his hand to receive it,

¹ Horace, *Odes*, III, i, 7. "Clari Giganteo triumpho." Comp. the cameo at Naples, representing Zeus Gigantomachos, signed ΑΘΗΝΙΩΝ, engraved in Milman's edition of Horace, "Neapolitan Gem of Jupiter and Iltans. From an Impression." This book is illustrated by the late Sir George Scharf's drawings from the antique. For the Gigantomachia, see Perry, *Greek and Roman Sculpture*, pp. 545-555, especially p. 549 seq., "The Zeus Group." *Id.*, *Descriptive Catalogue of the Collection of Casts from the Antique in the South Kensington Museum*, pp. 99-101.

² Moses smote the rock twice, Numbers xx, 11; *ibid.*, vv. 8, 10; Cruden's *Concordance*. Cf. St. Paul's First Epistle to the Corinthians x, 4, *ἔπιον γὰρ ἐκ πνευματικῆς ἀκολουθούσης πέτρας, ἡ πέτρα δὲ ἦν ὁ Χριστός*. Alford's edition of the Greek Testament, Vol. II, p. 523 seq., *πνευματικὸς* typical, cf. Revelations xi, 8. The rock followed the Israelites in their journeyings, and gave forth water all the way. . . . How extensively the traditionary reliques of

unrecorded Jewish history were adopted by apostolic men under the inspiration of the Holy Spirit, the apology of Stephen may bear witness.

Aringhi, *Roma Subterranea* (Catacombs), tom. II, p. 101, fol., 1651: "Tabula unica cubiculi undecimi Coemeterii Marcellini et Petri inter duas Lauros ad S. Helenam Via Labicana." *Ibid.*, Lib. V, cap. XII, § 3, p. 482 seq.: "Mysteria aquarum e petra in deserto scaturientium. Petra in deserto Christum figurabat." *Ibid.* tom. I, pp. 450-461, lib. III, cap. XI, "De celebri Callisti Coemeterio." *Ibid.*, p. 546 seq., "Tabula Prima." No. iv, "Et demum Moysis virgae ictibus uberes aquarum rivos e petra educuntis." There are six full page plates of this catacomb.

Lübke, *Grundriss der Kunstgeschichte*, I, 1, "Altchristliche Kunst." 3. "Bildneri und Malerei." pp. 250-252, "Moses mit dem Stabe Wasser aus dem Felsen schlagend," Fig. 170, "Wandgemälde aus den Katakomben von S. Calixtus."

another kneels thankfully before the god. Then come various scenes in the life of Mithras—he is hanging on the neck of the bull, and following the car of the sun-god, who in the next compartment kneels before him; thus the superiority of Mithras is indicated. He rides with a bent bow in his hand, and an attendant in oriental costume behind. The last compartment differs from the rest; Mithras and Sol are reclining on a couch with a small table before them. Compare the *Visit of Bacchus to Icarus* in the British Museum, and Böttiger, *Sabina*, Part II, Pl. XII, and description of the plates, pp. 255–257.

Beside the Kastell there was an additional building. We should observe that it was not continued on the same lines as the original construction of the camp, but took the form of an irregular trapezium. This deviation was doubtless caused by a declivity in the ground, which prevented the Roman engineers from carrying out their plans as usual.¹

Die Kastelle bei Öhringen.—Near this place there were two Roman forts, Ost-oder Rendelkastell and Westoder Bürgkastell, and a bathing establishment (v. Pl. II, Fig. 2, where the low pillars of the hypocaust are distinctly marked; Pl. III, Fig. 2, is an attempt at a restoration of the baths). Many inscriptions have been found here and objects of various materials—gold, bronze, iron, glass, terra-cotta and stone. Some are preserved in the Collection of Antiquities at Stuttgart.

Das Kastell Unterböbingen is one of the greater camps in the series, and nearly square. The *Porta praetoria* faces the north and the *Limes*. There are two towers at the gates, not projecting beyond the wall, therefore not *propugnacula*, as at Trèves and Ratisbon.² The *Porta*

¹ In this memoir I have placed three castella in the order of their geographical position, beginning with the most northerly and proceeding southwards. Osterburken is situated east of the river Neckar, in the latitude of Heidelberg; Öhringen, nearly as far south of Osterburken as Heilbronn is; Unterböbingen on the left bank of the river Rems in the same latitude as Stuttgart. A map giving a general view of the boundary wall is appended to each separate description of the forts,

“Uebersichtskarte des obergermanischen und rätischen Limes, ■ festgestelltes, □ vermuthetes römisches Kastell” (Grenzwall). There are also plans of each fort and maps of the immediate neighbourhood.

² Leonardy, *Panorama von Trier und Umgebungen*, pp. 24, 25, two engravings of the *Porta-Nigra*, Stadtseite und Nordseite. Arendt, *Das monumentale Trier*, Taf. III, Fig. 1, “Persp. Ansicht der *Porta-Nigra*”; 1 bis. Grundriss, *ibid.*,

decumana (opposite the *praetoria*) had one entrance, the side gates two entrances; at the north-west end the foundations of a rectangular building for artillery were discovered. The ground-plan can be distinctly traced; while the position and form of the *praetorium* are normal, the *sacellum* has a striking peculiarity—a smaller apse was added to the larger one. Probably the smaller one was higher, and contained images of deities raised on a platform, with the wall of the larger apse as a façade. Rooms 9 and 10, Pl. I, were provided with apparatus for heating, and the floor in the hypocaust was supported by small pillars of tufa 50 centimètres high. Inequality of surface is the most remarkable feature in this camp; it seems to have been caused by a landslip during the Roman occupation. Among the objects found we may especially notice the fragment of a military diploma of honourable discharge (*honestu missio*), Pl. II, Fig. 3, fully explained in the text, p. 6, Bronzen 1.¹

p. 12, "Die gewaltige Porta Martis, später Simonskirche, Porta nigra genannt, an der Nordostseite, nach dem Vorort 'Maar' zu." *Arch. Jour.*, 1891, XLVIII, my paper on "The Roman Antiquities of Augsburg and Ratisbon," 398-402, text and notes, and illustration from a photograph of the Porta Praetoria at the latter city, facing p. 400.

Propugnaculum is also used as a nautical term, and means a tower on the deck of a ship from which missiles were discharged. Winckelmann, *Monumenti Antichi inediti*, Tom. II, Parte quarta, Capitolo XV, p. 280: "Questo torri . . . solevano essere due, una alla poppa, e l'altra alla prora," etc. Tom. III, pl. 207 (folio). Baumeister, *Denkmäler*, art. "Seewesen," p. 1608: "Das Deck der Kataphrakten trug nach Pollux I. 92, zuweilen holzerne Türme, *πύργια, turres, propugnacula*, die auf den *πρυγούχοι* ruhten." *Ibid.*, p. 1634, folding plate, Tafel IX. Pliny, *Nat. Hist.*, XXXII, Sect. I, §3: "Sed armatae classes imponunt sibi turrium propugnacula, ut in mari quoque pugnetur velut e muris." Tacitus, *Annals*, XV, 9. "Interim Corbulo . . . naves magnitudine praestantes, et connexas trabibus, ac turribus auctas, agit per annem." The same word occurs in Horace's First Epode, one of his most beautiful poems, addressed to Maecenas before the battle of Actium:

"Ibis Liburnis inter alta navium,
Amice, propugnacula."

Florus, lib. 4, cap. 11, § 5, describes Antony's ships. "*Turribus atque tubulatis alleratae, castellorum et urbium specie.*" The edition of Graevius, Amsterdam, 1702, p. 500, has an engraving of a trireme from Trajan's Column.

¹ *Tabulae honestae missionis* are well known to English antiquaries, having been discovered in our own country. *Lapidarium Septentrionale*, pp. 3-8, Diplonata found at Malpas in Cheshire, Sydenham Common in Kent, and Riving in Yorkshire, folio plates in the same colours as the originals. Many have been brought to light subsequently to the publication of Orelli's *Collectio Inscriptionum Latinarum*, 1828, vide Nos. 737, 2652, 3571, 3577 *seqq.* Some of these "recens reperta" appear in the Supplement to that work by Henzen, see especially 6857, 6857A, from Carnuntum, Deutsch-Altensburg, on the southern bank of the Danube, and now deposited in the Kunst-Historischen Sammlungen at Vienna (r. Baron Ed. von Sacken in *Sitzungsberichte d. phil. hist. Classe der k. k. Akad. der Wissenschaften*, Vol. XI, fasc. II *seqq.*, tab. III). One of these documents may be seen in the Paulus Museum at Worms, and therefore not far distant from the boundary wall which we have been considering.

St. Bernard said *Respice, prospice, suspice*; and it is the privilege of the old to look backwards as well as forwards. When we contrast the position of antiquarian studies at present with what it was in the last century, and even nearer our own time, we may congratulate ourselves on the progress that has been made. Scholars formerly indulged in learned but fanciful conjectures which only exposed them to ridicule;¹ but now, by examination of existing monuments, by comparing them with each other, by observing the characteristics of different styles and periods, and conducting those researches in the light of the best revisions of ancient texts, archæology has been elevated into a science, and, purified from error, rests upon foundations both solid and secure.

APPENDIX.

The paragraph in Virgil, *Æneid*, I, 8-11, a part of which appears on the mosaic at Sousse, deserves to be quoted entire:—

“Musa, mihi causas memora, quo numine laeso,
Quidve dolens, regina deum tot volvere casus
Insignem pietate virum, tot adire labores
Impulerit. Tantaene animis caelestibus irae?”

One clause, *quo numine laeso*, presents some difficulty, and has been variously interpreted. It cannot mean an inquiry as to what deity has been offended, which would be unnecessary because Juno has been mentioned by name in the fourth line. The participle in Latin is often used where the English idiom prefers a substantive, so that *numen laesum* would be equivalent to *laesio numinis*, an offence against the deity of Juno, as A.U.C. (i.e. *ab urbe condita*) is translated from the foundation of Rome. Henry explains *numen* = *arbitrium*. See the note in Conington's *Virgil*, edited by Nettleship, Vol. II, p. 4 *seq.*, and the *Journal of Philology*, Vol. XVII, No. 34, pp. 157, 158.

Sousse is the French form of the modern name *Susa*, on the site of the ancient *Hadrumentum*—the place to which Hannibal fled after the

¹ Stukeley's writings are a striking example of this style. A French critic in the *Nouvelle Biographie Générale* has estimated them correctly: “C'était un homme bon, mais bizarre, un savant remarquable, mais emporté par une imagination fougueuse, que lui faisait commettre les erreurs les plus fan-

tasques.” The nearest parallel I know to this strange compound of learning and folly is to be seen in Bentley's notes on the *Paradise Lost*—characterised by Bishop Newton as the “Dotages of Dr. Bentley” in the preface to his edition of the poem.

decisive battle of Zama. *C. I. L.*, VIII, 1, p. 14, § VII, "Colonia Concordia Ulpia Trajana Augusta Frugifera Hadrumetum, postea Justinianopolis (*Susa*)."
Tribu Papiria Provincia Byzacena, *Inscr.* Nos. 59-67, with a sketch of its history.

Comp. Mrs. Jameson, *The History of our Lord as exemplified in Works of Art, etc.*, II, 144, "The Crucifixion," full page engraving, which also corroborates remarks made above concerning river-gods with horns, "Early ivory of the ninth century," "Classic personifications of Water and Earth," the one a bearded and horned river-god with a fish or an oar in his hand, sometimes riding on a dolphin, and with a stream issuing from his subverted urn.

For a very early representation of the Crucifixion, see *The Lewis Collection of Gems and Rings*, by Professor J. Henry Middleton, p. 84, with engraving. Two figures are standing by; one is Longinus with the spear that pierced Christ's side.

Ger appears to have the same root as the Greek γαῖος, for the change from S to R presents no objection, being very common; e.g., we have the adverb *hier*, here, and the adjective connected with it, *hiesig*, in this place or country, native. Comp. *Key on the Alphabet*, p. 91 sq., *Eisen* iron, *Hase* hare, *Besen* broom; and s.v. *Ger*, *Etymologisches Wörterbuch der Deutschen Sprache*, by Friedrich Kluge. The Latin form of this Greek word is *gaesum*, which occurs in Virgil, *Æneid*, VIII, 661, where the poet describes the Gauls besieging the Capitol, represented on the shield of *Æneas*.

"Duo quisque Alpina coruscant

Gaesa manu, scutis protecti corpora longis."

De Vit in his edition of *Forcellini's Lexicon* has a good article on *Gaesum*, and observes that two of these spears are frequently mentioned as being carried together. From ancient authors we learn that the *gaesum* was a Gallic javelin, but was also used by other nations. In the Third Book, *De Bello Gallico*, Chaps. 1-6, Cæsar relates the campaign conducted by his lieutenant Galba against the Nantuates, Veragri and Seduni, south-east of the Lake of Geneva (*Lemanus*). *Ibid.* Book IV, Chap. 10, where Cæsar traces the course of the Rhine from its source. We find the first of these tribes in most editions, but there must be some mistake in the manuscripts, because the geographical position of the Nantuates is far west of the river, being between Villeneuve and Martigny, north of Mont Blanc, and near Chamounix. The territories of these three tribes are accurately defined *lib. citat.*, Chap. I, init. "ab finibus Allobrogum, et lacu Lemanno, et flumine Rhodano, ad summas Alpes pertinent."

Galba, who commanded the twelfth legion, fixed his winter quarters at Octodurus (Martigny), where the Rhone receives the Drance; and we may notice that the Romans showed the same wisdom here as they did in choosing *Castra Vetera* (Xanten) for a military station at the junction of the Rhine and Lippe. Not many days had elapsed when the general was informed by scouts that the Gauls in great force had occupied the surrounding mountains.

A council of war was held, when it was decided to defend the camp. The enemy, after a short interval, rushed down on all sides, hurling stones and javelins (*gaesa*); at first they broke the rampart and filled up the trenches, but afterwards in a successful sortie

(*eruptione facta*) the garrison, surrounding the Gauls, slaughtered the third part of their army, and put the rest to flight in such confusion that they did not venture to take up a position even on high ground. Galba, satisfied with this victory, abandoned the camp and quickly retired to the Roman Province, which at that time was of the same extent as the modern Dauphiné, Provence and Languedoc.

To the remarks already made, the following references may be added:—Gustav Körting, *Lateinisch-romanisches Wörterbuch*, “*Gaesum*. 2, Wurfspeer; franz: *gèse*, Pike (altfrz. *gieser* = **gesürum*). See also Armstrong, *Gaelic Dictionary*, s.v. *Geis*, a spear, a javelin; a fishing spear. *Hesychii Lexicon*, I, 412: “*Γαῖσος-ἐμβόλιον ὀλοσίδηρον. καὶ ὄνομα ποταμοῦ. οἱ δὲ μισθόν. ἢ ὕπλον ἀμυντήριον*. Pollux, *Onomasticon*, edit. Dindorf, 1824, II, 100, agrees with Hesychius in stating that this javelin was all iron, both head and stock, Lib. VII: *κεφάλαιον ἈΓ. περὶ ποιητικῶν τεχνῶν καὶ τῶν λοιπῶν. § 156, Δορυξούς, δόρυ ὀλοσίδηρον. καλεῖται δὲ γαῖσος, καὶ ἔστι Λιβυκόν. Annotations*, V, p. 458, nisi legendum fuerit *Ἰβηρικόν* pro *Λιβυκόν*.

It may seem strange that the foremost scholar of the sixteenth century should have selected for himself two names, neither of which is pure Latin. *Desiderius* does not occur even in the list of words which Forcellini has excluded from his *Lexicon of Classical Latinity*—“a nobis improbata et expulsa”—and admitted only into the Supplement; nor is it mentioned by Bailey in the *Auctarium* appended to Forcellini's work, or by Ducange in his *Glossary*. But we meet with it as a proper name at a late period, borne by the last of the Lombard kings, whom Charlemagne conquered and dethroned, about A.D. 775 (Gibbon's *Decline and Fall*, Chap. XLIX, Vol. VI, p. 156, edit. Dr. William Smith).

No less than five *Desiderii* are mentioned as saints. *Vide* Potthast's *Index to the Acta Sanctorum*: “Vollständigeres Verzeichniss der Heiligen, ihre Tage und Feste.” One of them, called by the French St. Didier or Dizier, is third in the catalogue of Bishops of Langres, but in the case of the earlier names accuracy cannot be guaranteed. *Memoirs of the local Archæological Society*, Vol. III, 1881. *Les Évêques de Langres, Étude Epigraphique, Sigillographique et Héraldique*, pp. 2 and 3. St. Didier is said to have been beheaded by Crocus, chief of a band of barbarians who besieged this city, having vainly endeavoured to intercede in favour of the inhabitants. The date of these events is assigned by some to the year 264, by others to 411, a discrepancy which may cause a shadow of doubt to pass over the biographies of the old annalists. Appended to the account of the martyrdom, we read in the *Acta Sanctorum* a history of the discovery and translation of his remains, 1314 A.D.: “*Pretiosum corpus . . . caput suum super pectus ejus in manibus tenens, a deputatis de tumultu est sublatum*.” He was buried in the Church of Sainte-Madeleine, afterwards called by the name of the martyr. At present the apse of this church has been included in the Museum building, and forms the hall of antiquities. The restored tomb of St. Didier occupies the centre; it bears an inscription ending with the words, “*Mort victime de son dévouement à la Ville*” (*Mém. de la Soc. Hist. et Archéol. de Langres*, III, 65 seq.)

and my paper on "The Antiquities of Langres and Besançon," *Arch. Jour.*, XLIII, 90, *Cathedral of Saint Mammès*.

I have already stated that *Erasmus* is an incorrect word. The Greek form is Ἐράσμιος, which occurs in Simonides, Æschylus, Xenophon and other ancient authors, and is obviously connected with ἔραμαι, amo; ἐρίω, amo; ἔρω, amor. Erasmus himself afterwards discovered his mistake, and called his godson Joannes Erasmius Frobenius (Jortin, *op. citat.*, I, 3).

The passage in Dion Cassius referred to above, LIV, 22, is very important, Ἑσβαλόντες οὖν ἐν τὴν χώραν πολλαχόθεν ἅμα ἀμφοτέροι, αὐτοὶ τε καὶ διὰ τῶν ὑποστρατήγων, καὶ ὃ γε Τιβερίος καὶ διὰ τῆς λίμνης πλοίοις κομισθεὶς, ἀπὸ τε τούτου κατέπληξαν αὐτοὺς ὡς ἐκάστοις σφίσι συμμαγνύντες, κ. τ. λ. etc. This historian, who seems to have composed his work in the earlier part of the third century, may be regarded as a sufficient authority for the foregoing statement. "He had access to many sources of information no longer extant, and proves himself able to make a good use of them." The campaigns of Drusus and Tiberius against the Rhaeti (Tirol) and Vindelici (Bavaria) are known to us from the writings of Strabo, IV, 6, 206, and Suetonius, *Vita Tiberii*. 9; and their victories are celebrated in the most martial of Horace's *Odes*, *Carm.* IV, iv, 17:—

"Videre Raetis bella sub Alpibus
Drusum gerentem Vindelici";

and *ibid.*, xiv, 9:—

"Milite nam tuo
Drusus Genaunos, implacidum genus,
Breunosque veloces et arces
Alpibus impositas tremendis
Dejecit acer plus vice simplici.
Major Neronum mox grave proelium
Commisit, immanesque Raetos
Auspicis populit secundis."

See Bentley's note on the former passage. He substitutes Raetis for Rhoeti, and gives references to many authors. Orelli, in his commentary on the latter ode, quotes part of an inscription in *tropaeo Alpium* containing the names Breuni, Vindelici and Genaunos. We owe it to Pliuy, *Nat. Hist.*, III, xx, 24, §§ 136, 137, ed. Sillig, I, 263 *seq.* It states that the trophy was erected in honour of Tiberius, "*Quod ejus ductu auspiciisque gentes Alpine omnes quae a mari supero ad inferum pertinebant sub imperium pop. Rom. sunt redactae.*" The total number of these nations amounts to forty-four, including four subdivisions of the Vindelici. The Breuni inhabited North Tirol; their name survives in the Brenner Pass, through which the railway from Innsbruck to Verona is carried, also in Bruneck, a station north-east of Brixen, on the line from Franzensfeste to Villach. Compare *C. I. L.*, III, 2, 706, "*De Raetiae Provinciae origine et finibus.*"

Tasgetium has been mentioned as the name of a town near the Lake of Constance. Tasgetius in Cæsar, *Bell. Gall.*, V, 25, is a nobleman of the highest rank among the Carnutes (Chartres), restored by Cæsar to the kingdom which his ancestors had held. However, after a short reign he was openly assassinated. The coins of Tasgetius are numerous. *Catalogue des Monnaies Gauloises*, by Muret

and Chabouillet, p. 139, *seq.*, Nos. 6295–6307; *Atlas des Monnaies Gauloises*, by Henri De La Tour, Pl. XIX, No. 6295, "EAKESOOYIZ. Tête d'Apollon diadémée à droite; derrière, une fenille; Rev. TASGHTIOS. Pégase gallopat à droite." M. de la Saussaye supposed that EAKESOOYIX was the grandfather of Tasgetius: which would agree well with Cæsar's words *summo loco natus*; but M. de Longpérier thinks that we have here a surname of Apollo. The obverse of the coin is imitated from the gens Calpurnia, and the reverse from the Titia. Compare Babelon, *Monnaies de la République Romaine*, I, 289–297, 300–302; II, 489–491.

As the coins of Tasgetius were copied from the Roman denarii Calpurnia and Titia, so those of Tatinus, a Gallic chief, imitated Titia and Marcia; they have the legend TATINOS on the reverse, with the device—Cavalier, au galop, à droite; sous les pieds du cheval, un rameau. *Catalogue des Monnaies Gauloises*, p. 98, Nos. 4382–4391. Adolphe Duchalais, *Description des Médailles Gauloises de la Bibliothèque Royale*, 1846, pp. 109–111, "Imitations Consulaires," where various explanations of the obverse are cited, some of them highly improbable. For the reverse, compare Babelon, *op. cit.*, Vol. II, "Marcia," §§ 3, 4. Q. Marcins Philippus, L. Marcins Philippus, pp. 186–188, Nos. 11, 12, especially the latter. Revers—statue équestre représentant un guerrier qui tient une branche dans la main droite; sous le cheval, un rameau incliné. These coins are curious, showing one of the Philips, Kings of Macedon and the helmet ornamented with bull's horns, also the head of Philip V., helmeted with diadem and cheekpieces (παρυβαθίς)—a portrait like that on Macedonian money. Rich, *op. cit.*, s.v. *buccula*, *galea*; Juvenal, X, 134, "Lorica, et fractâ de casside buceula pendens."

The flotilla which Tiberius launched on the Lake of Constance suggests to me an historical parallel, which seems not to have been noticed by preceding writers. In the year 1652 Ross Castle surrendered to the Parliamentary army under General Ludlow. It is situated on an island, or rather peninsula, in the Lower Lake near Killarney, and the superstitious natives believed in a prophecy that this fortress could not be taken till a ship should swim upon their waters; hence they were proportionately disheartened by the spectacle which Ludlow describes in his *Memoirs*, printed at Vivay (*sic*) in the Canton of Bern, MDCXCVIII, I, 416. "When we had received our Boats, each of which was capable of containing a hundred and twenty Men, I ordered one of them to be rowed about the Water in order to find out the most convenient Place for Landing upon the Enemy; which they perceiving, thought fit by a timely submission to prevent the Danger that threatned them." Doubtless the boats were brought from Killorglin up the River Laune to Lough Leane (both words were probably the same originally) called the Lower Lake by boatmen, guides and guide-books; not from Kinsale, as some have supposed which is too distant. Moreover, the transport across the mountains, and by bad roads in those times, was almost impossible, especially when we consider the size of the boats.

Ludlow voted for the execution of Charles I., and afterwards opposed Cromwell because he aimed at supreme power. "Il était républicain dans le parlement, il mourut républicain sur les bords du lac de Genève." *Biographic Studies on the English Revolution*, by M.

Guizot, English Translation, 29-58; see also Guizot, *Histoire de la République d'Angleterre et de Cromwell* (1649-1658), II, 171-177, for the conversation between the Protector and Ludlow, given *in extenso*.

The description of the museum referred to above deals chiefly with the prehistoric remains discovered in the neighbourhood of Constance. After a notice of objects in the collection which exhibit successive geological periods, an account is given of the earliest traces of human beings, and of researches that have made us acquainted with cave-dwellings, probably inhabited four thousand years ago.

From writers preceding Herodotus we learn the use of caves for habitation and for burial, but the father of history is the first to employ the term *Troglodytes*. Τρώγλη is evidently connected with the verb τρώγω, ἔτραγον, to gnaw, and properly means a hole made by gnawing. Compare τραγήματα, sweetmeats, Aristophanes, *Acharnians*, v. 1901 seq. :—

“στέφανοι, μύρον, τραγήμαθ', αἱ πόρνοι πάρα,
ἄμυλοι, πλακοῦντες, σησιμοῦντες, ἴτρια,”

From τραγήματα comes the French word *dragées*. Stephens, *Thesaurus Linguae Graecae*, edit. Didot, gives examples of τρωγλοδύτης and τρωγλοδυτικός from Aristotle, Pliny, and other writers, amongst them from *Testamenta XII Patriarcharum*, p. 636 ult. : “Διαθήκη Ζαβουλών περί εὐπλαγχνίας καὶ ἐλέους.” Cap. 4, ἀφέντες γὰρ τὴν ὁδὸν τὴν μεγάλην, ἐπορεύθησαν διὰ τραγλοκολλητῶν ἐν τῇ συντόμῳ,” so Dr. Sinker reads in his edition, p. 166, but in a footnote we find that Codex Oxoniensis has τρωγλοδυτῶν—MSS. Lat. *per asperos sinus*. If we accept this variant, the patriarch relates that the merchants to whom Joseph was sold by his brethren (Genesis, chap. xxxvii, vv. 23-28) left the high road, and went by a short way through the country of the Troglodytes. In τραγλοκολλητῶν it might be supposed that, by the error of the transcriber or printer, a has taken the place of w : but this form of the word is supported by ἔτραγον and τράγημα.

Herodotus, IV, 183, informs us that the Ethiopian Troglodytes were the swiftest men of whom he had received any account, that they lived on serpents, lizards, and similar reptiles, and that they did not speak a language like any other, but screeched like bats. An author quoted by Baehr *in loco* mentions as an Arabic saying that the English and the Fellahin, the lowest class in Egypt, whistle like birds. This observation is by no means flattering to our national pride; it results from the too frequent occurrence of sibilant sounds in the language of *yes*. In the same chapter Herodotus speaks of the Garamantes (Ferzan) chasing the Ethiopian Troglodytes with four-horsed chariots, doubtless to carry them away and sell them as slaves.

But the geographer Strabo is a still more important authority than the early historian, because he mentions this people often, and gives many details. Lib. XVI, § 4, Vol. VI, p. 395, edit. Siebenkees, he defines their position from Hero to Ptolemais Theron or Ferarum, both on the western coast of the Red Sea; *ibid.*, § 17, pp. 424-427, he describes their manners and customs. Of the Latin authors for this subject Pliny is the most copious; the references in his *Natural History*, s.v. *Trogodyticae* (*sic*) occupy nearly one column and a half, closely printed, in Sillig's critical edition, Vol. VIII, p. 402 seq.

Keller's *Lake Dwellings in Switzerland and other Parts of Europe*, though not a recent work, is still a good authority for remains of this class brought to light in the neighbourhood of Constance. The English translation, by J. E. Lee, from whom I quote, appeared in 1866. He notices particularly Allensbach and Markelfingen on the Untersee, which is the western branch of the Bodensee, pp. 87-95; and Wallhausen on the Ueberlinger-See, the north-western branch of the same lake, pp. 96-122. At the last of these pages discoveries are shown in a tabular form. The same author gives a very interesting account of objects found in these settlements, especially articles manufactured from vegetable fibre and flax—e.g. cords, ropes, linen cloth—in a variety of patterns and excellent preservation; they were evidently suitable for the use of a population occupied in hunting, navigation and fishing (Plates LXXXII-LXXXVI).

Compare Anton Springer, *Handbuch der Kunstgeschichte*, I, Altertum, Fünfte vermehrte Auflage, bearbeitet von Adolf Michaelis: "Die Reste von Flechtwerken, die in den Pfahlbauten gefunden wurden. (Fig. 1), zeigen deutlich die natürliche Entstehung von Mustern, welche bereits vollständig den Reiz eines Ornaments besitzen und als Schmuckform seitdem die mannigfachste Verwendung gefunden haben." The illustration contains six specimens of textile fabrics, p. 2, Fig. 1, "Flechtarbeiten aus Schweizer Pfahlbauten." This excellent work is adorned by many engravings, admirably executed, in some cases derived from recent discoveries, and not to be found in ordinary compilations. It displays, as far as possible in one volume, the glories of ancient art—*res antique laudis et artis*.

The Irish crannoges differ widely from the constructions we have been considering. They are islets in lakes, surrounded by stockades formed of rough piles of timber, generally oaken, by which an enclosed area was fortified. Thus they became a place of retreat for robbers and predatory chiefs. A short but instructive article in the *Archæological Journal*, III, 44-49, 1846, throws light not only on this subject, but also on the state of Ireland during the sixteenth century. In the year 1567, a witness, giving evidence before the Lords of the Council, stated that a native chieftain, O'Neil, razed his strongest castles which he did not trust for his safety, and "that fortification that he only dependeth upon is sartin *ffresh-water loghe's* in his country." Notices of several crannoges are appended from the *Annals of the Four Masters*, and they are said to have been very numerous in the County Monaghan, which is studded with small lakes. These islets were generally artificial, and many objects, especially weapons, have been found there; among them a bronze handle of a javelin with a loop attached to it would attract the attention of the classical antiquary, reminding him of the *amentum* mentioned by Virgil, *Æneid*, IX, 665: "Intendunt acres arcus, amentaque torquent." By means of this thong "a rotatory motion was given to the missile before it was discharged," which accounts for the use of the verb *torqueo*. Compare the phrase to *throw silk*, both the Latin and English words having a double meaning, *hurl and twist* (Professor Key, *On the Alphabet*, p. 99, § 3 of the letter T). In Lucan the verb *amento* occurs, *Pharsalia*, VI, 221:—

"Quum jaculum parva Libys amentavit habena."

For the form of the noun *amentum*, see *Vergili Maronis Carmina ad pristinam orthographiam, quoad ejus fieri potuit, revocata*, ed. Philip Wagner; fifth volume of Heyne's *Virgil* re-edited, p. 416, "Verius puto *amentum*, geminata *m*, ut ibi extat in Medic.;" Festus, 25, "Qui hoc vocabulum a Graeco ἄμμα ortum tradit." Compare Greek ἀγκύλη, ἀγκυλόμεαι, to hurl spears, and the compounds διαγκυλίζομαι, διαγκυλόομαι. Xenophon, *Anabasis*, IV, iii, 28, διηγκυλωμένους τοὺς ἀκοντιστάς.

Darenberg and Saglio have an excellent article s.v. *Amentum*, Vol. I, p. 226 *seq.*; it is well illustrated by engravings. Fig. 250, Mouvement droit; 251, 252, Mouvement de bas en haut; 253, Javelot muni de l'amentum; 254, Ansata hasta. Fig. 253 from *Museo Borbonico*, Vol. VIII, tav. XXXVI. "Un trait gisant à terre autour duquel s'enroule une courroie" (mosaic of the battle of Issus). To these we may add a drawing in Sir Wm. Hamilton's *Etruscan Vases*, copied in the *Dict. of Antiqq.*, s.v. *Hasta*; and notice the phrase *hastae ansatae*, which shows that *ansa* is equivalent to *amentum*.

For the Irish crannoges the most important references are Sir W. R. Wilde's *Catalogue of the Antiquities in the Museum of the Royal Irish Academy*, and papers contributed to the *Proceedings* of this Society, I, 420-426; VII, numerous articles, especially pp. 147-153; Index to Vols. I-VII; VIII, 274-278, 412-427, with plans and engravings. See also in *Archæologia*, Professor Robert Harkness, "On a Crannoge found in Drumkeery Lough, Ireland," XXXIX, 483.

If we turn from ancient monuments to ancient authors, we have the testimony of two very celebrated writers—Hippocrates and Herodotus, whom I mention in chronological order. The father of history describes accurately lake-dwellings in the Strymonic lake Prasias, erected on platforms (ἱκρία) supported by piles (σταυροί) and notices that they had a narrow approach from the land by a single bridge. When Darius returned from his expedition into Scythia, Megabazus was left as commander-in-chief of the army in Europe; he subdued many Thracian tribes, and removed some of them to Phrygia, but failed in the attempt to conquer the "amphibious" lake-dwellers. Lake Cercinitis or Prasias is not to be confounded with Lake Bolbe, north of Chalcidice, and near Stagira, the birth-place of Aristotle. It is said that the fishermen of Lake Prasias still inhabit wooden cottages built over the water, as in the time of Herodotus.

Hippocrates is the other ancient authority for habitations of this kind; B.C. 460 has been generally accepted as the date of his birth; however, we have not good evidence for determining it exactly. Describing the people who live on the Phasis, he says: "περὶ δὲ τῶν ἐν Φάσει, ἢ χωρὶς ἐκείνης ἐλώδης ἐστὶ καὶ θερμὴ καὶ ὑδατινὴ καὶ δασεία, ὁμβροὶ τε αὐτόθι γίνονται πᾶσαν ὥρην πολλοὶ τε καὶ ἰσχυροί. Ἡ τε διαίτα τοῖς ἀνθρώποις ἐν τοῖς ἔλεσιν ἐστίν, τὰ τε οἰκήματα ξύλινα καὶ καλὰ μίνα ἐν ὕδασι μεμνηχνημένα." *De aëre locis et aquis*, p. 289, "Magni Hippocratis Medicorum omnium facile principis opera Anutio Foësis Mediomatrici medico auctore, Genevæ, 1657-62." Anuce Foëss was a celebrated Greek scholar and physician, born 1528, died 1595. This edition of Hippocrates is a ponderous folio of more than 1,800 pages, containing a Latin translation together with the Greek text;

Foës devoted his life to its preparation and to the exercise of his profession at Metz.

Hippocrates, *loc. citat.*, p. 290: "αὐτός τε ὁ Φάσις στασιμώτατος πάντων τῶν παταμῶν, καὶ ῥέων ἡπιώτατα." Of this river in Colchis, at the east end of the Euxine, the *Rhion* is a tributary, and the ancient name remains in the modern *Rioni*.

"The salutation *pro imperio* and the salutation after a victory . . . are counted as similar units by every emperor who signifies the number of his acclamations among his list of honours. Thus, if we find Imp. IV attached to a name . . . the sum is made up by one accession to the throne and three victories. A Roman emperor took credit for the successes of the generals, because they were gained under his auspices." Hence it is evident that from this part of the legend on imperial coins we can only determine a date approximately. Under the Republic the title of Imperator followed the name, but the Emperors assumed it as a *praenomen* (Tacitus, *Annals*, Bk. III, Chap. 74, with the notes of Lipsius and other interpreters).

The art of die-sinking continued to flourish longer than that of sculpture, which began to decline under the Antonines, as may be seen if we compare with each other the reliefs on the historical columns of Trajan and Marcus Aurelius at Rome. For a specimen of skilful workmanship in medals of a late period, see Cohen, *op. cit.*, VI, engraving on the title-page, "Postumus—one of the Thirty Tyrants."

Among the ancient Romans, as we learn from the authors, men and women stripped and bathed together. Martial, *Epigrams*, III, 51:—

"Cum faciem laudo, cum miror crura manusque,
Dicere, Galla, soles 'Nuda placebo magis,'
Et semper vitas communia balnea nobis.
Numquid, Galla, times, ne tibi non placeam?"

Cf. ibid., Epigram 72.

Plato in his treatise *De Republica* seriously proposes the same arrangement for gymnastic exercises in the palaestra, Book V, p. 452: "Τί, ἢν δ' ἐγὼ, γελοιότατον αὐτῶν ὄρα; ἡ δηλαδὴ ὅτι γυμνὰς τὰς γυναῖκας ἐν ταῖς παλαίστραις γυμναζομένας μετὰ τῶν ἀνδρῶν, οὐ μόνον τὰς νέας, ἀλλὰ καὶ ἡδὴ τὰς πρεσβυτέρας;"

Ibid., p. 457: "Ἀποδύετον δὴ ταῖν τῶν φυλάκων γυναῖξιν, ἐπεὶ περ ἀρετὴν ἀντὶ ἱματίων ἀμφιέσονται, καὶ κοινωνητέον πολέμου τε καὶ τῆς ἄλλης φυλακῆς τῆς περὶ τὴν πόλιν, καὶ οὐκ ἄλλα πρακτέον.

In the context from which the preceding extracts are taken there is a striking coincidence with social delusions now prevalent among ourselves. Plato's argument is simply this: women have the same nature as men, therefore they ought to have the same duties, both in peace and in war; only, as the sex is weaker (*διὰ τὴν τοῦ γένους ἀσθενείαν*), the lighter portion of the task should be assigned to it. We need not go far to seek a refutation of such a theory. A distinction between the sexes has been deeply implanted, and it cannot be eradicated by the speculations of a Greek philosopher or the Acts of a British Parliament. Compare the Introduction to the Oxford translation of Plato's *Republic*, which bears Jowett's

name on the title page; some remarks are made on the supposed "equality of the sexes," p. 143 *seq.*

Abnoba has the penultimate syllable short, as we learn from the *Descriptio Orbis Terrarum*, by Rufus Festus Avienus, v. 430 *seqq.* :—

"Porro inter cautes et saxa sonantia Rhenus,
Vertice qua nubes nebulosus fulcit Adulas,
Urget aquas," &c.

v. 437 :—

"Abnoba mons Istro pater est, cadit Abnobæ hiatu
Flumen; in eos autem convertitur axes,
Euxinoque salo provolvitur."

He says that the Rhine rises in Mount Adulas, and the Danube in Abnoba. Adulas, according to Sir Edward Bunbury, a great authority for classical geography, signifies the lofty mountain group about the passes of the *Splügen* and *S. Bernardino*, and at the head of the valley of the *Hinter Rhein*. See the article s.v. in Smith's *Dict. of Gr. and Rom. Geogr.* bearing the initials E.H.B.

The poem of Avienus, quoted above, is a paraphrase of the work of Dionysius Periegetes (*Διονυσίου Οικουμένης Περιήγησις*), included in the *Geographi Graeci Minores*, edited by Car. Müller and published by Didot, II, 103–176. In the same volume we have Avienus, vv. 1394, pp. 177–189. See also *Poetas Latini Minores*, edit. Wernsdorf, V, ii, 621–1153, text and commentary. Another translation of Dionysius Periegetes, who probably flourished A.D. 300, was made by the grammarian Priscian for educational purposes, *Geogr. Graec. Min.*, *ibid.*, pp. 190–199.

Lastly, the testimony of inscriptions should be adduced :—

IN H. D. D
DEANAE ABN
OBAE CASSIA
NVS CASATI
V. S. L. L. M.
ET ATTIANVS
FRATER. FAL
CON. ET CLARO
COS.

Orelli, *Inscr. Lat.*, No. 1986, I, 351, text and note.

IN H. D. D. = in honorem Domus divinae, *i.e.* the Imperial family. The words *divina domus* remind us of an epithet which Tacitus often applies to deceased emperors, *e.g.* *Annals*, I, 8, and 42, where we have both *divus Julius* and *divus Augustus*.

After CASATI there is a *lacuna* which should be supplied by *filius*. V.S.L. L. M. may be expanded thus: *rotum solvit libentissime merito*; but sometimes LL = *libentes*.

The date of the inscription, A.D. 193, is known from the Consuls; their names in full are Q. Sosius Falco, C. Julius Erucius Clarus. This year, A.D. 193, was a remarkable one, because in the course of it the Roman world had three rulers in the following order:—Pertinax, Julianus who bought the empire, and Septimius Severus:

ABNOBAE occurs alone, with omission of DIANAE, in an

inscription found near Roetenberg in the Black Forest (*Orelli*, Vol. II, No. 4974). I quote it *in extenso* :—

ABNOBAE
C. ANTONIVS
SILO 7 LEG. IA
DIVTRICIS
LEG. II. ADIVTRI
CISSETLEGIIIAVG
ETLEGIIIIFF
ETLEGXICPF
ETLEGXXIIPFD
VSLLM.

After SILO we have the centurial mark 7; it is an abbreviation for *Centurio* or *Centuria*, and is supposed by some to represent a staff, made of a vine-branch, with which the officer chastised his soldiers. Juvenal, *Sat.*, VIII., 247 :—

“Nodosam post haec frangebat vertice vitem.”

7 is often rounded off, and so resembles C reversed. For this mark see Bruce, *The Roman Wall*, 4to. edition, pp. 415–417, with five illustrations. The centurial stones may have indicated portions of work done by a troop, or perhaps pointed out space set apart for quarters in an encampment. One of them, figured p. 416, has a special interest, and is inscribed as follows :—

PED[ATVRA] CLA[SSIS]
BRI[TANNICAE]

The ground of
the British fleet.

Lapidarium Septentrionale, fol., 1875, p. 487, Index XIII, marks, abbreviations and peculiarities in spelling. Six examples are given under *Centuria*, *Centurio*, 7, 3, C, 3, CE, 3, with references.

FF in our inscription stands for Flavia Fidelis (or Firma); it might in other cases = Fausti Filius, Fecerunt, Felicissimus, Fortissimus (Imperator), or Filii.

The *Dict. of Antiqq.*, third edition, s.v. *Exercitus*, Vol. I, p. 788 *seq.*, has a list of legions in tabular form—Quarters, Special Distinctions, Duration of Existence. Compare *Res Gestae Divi Augusti ex Monumentis Ancyrano et Apolloniensi*, edidit Th. Mommsen, accedunt tabulae tres (facsimiles of the original inscriptions on a reduced scale, Plates I and II are Roman characters, Plate III is Greek). *Latina Inscriptio*, 3, vv. 35, 36; *Commentarii*, Caput XVII, pp. 44–50, *esp.* p. 46: “Laterculum legionum, quae extremis annis Augusti fuerunt, addita in singulis originis, ubi fieri potuit, et interitus aliqua indicatione, item provinciae, in qua primum castra quaeque habuissent invenitur,” p. 45. Laterculum (πλινθιον), diminutive of *later*, a brick, means a register of offices and dignities in the Roman Empire—the name indicates its shape, which was rectangular, and not like the *volumen*, a roll. Mommsen writes *Hunc laterculum*, p. 47; but De Vit gives the neuter gender, following Forcellini, who appends a note s.v., “De genere ne ambigas neutrum facit Isidorus, Origines VI, 17.

Augustus built at Ancyra a magnificent temple of marble, and inscribed there a history of his deeds, almost in the style of an

Asiatic sovereign. This Ancyra (Angora) in the northern part of Galatia, also called Sebaste in honour of Augustus, west of the River Halys, must be carefully distinguished from another city with the same name in the north-west of Phrygia, near the borders of Mysia and Bithynia.

Wilmanns, *Exempla Inscriptionum Latinarum in usum praecipue academicum*, gives a good list of abbreviations with expansions, Vol. II, Index XVI, Compendia Scripturae, pp. 710-737. See especially p. 736, V.S.L., etc. The book corresponds to its title, and the tyro in epigraphy will find it very useful for reference, but if he wishes to see reproductions as nearly as possible facsimiles of the originals, he should peruse Spon's *Miscellanea Eruditorum Antiquitatis*, Lugduni, 1685—Bell's *Chronological Tables of Universal History*, "Literature and Painters," Tab. IX, columns for France and Switzerland.

Quintus Curtius Rufus, the Roman historian of Alexander the Great, probably wrote under the Emperor Claudius, but the date is uncertain; this work is entitled *De Rebus Gestis Alexandri Magni*. In the account of Babylon he says, Book V, chap. 5, "Pensiles horti sunt, summam murorum altitudinem aequantes, multarumque arborum umbra et proceritate amoeni," and enters into minute details of construction. Diodorus Siculus was a contemporary of Julius Caesar and Augustus. In Book II, chap. 10, edit. Bipont, II, 35-38, we have a description of these gardens at still greater length—"ὁ κρεμαστός καλούμενος κήπος." He calls the vaults that supported the terraces *σύριγγες*. Cf. Strabo, lib. XVI, cap. I, § 5, p. 738: "κήπος, ἔχων ἐν τετραγώνῳ σχήματι . . . συνέχεται δὲ ψαλιδώμασι καμαρωτοῖς—fornicibus concameratis." Pliny, *Hist. Nat.*, XXXVI, §§ 83, 94, 104. We cannot implicitly trust the accounts of these late writers, as they may have only copied the statements of predecessors who were inaccurate or ignorant.

But the buildings of the seventeenth century to be seen on the lake Maggiore may enable us to picture to ourselves the hanging-gardens of the ancients: L. Boniforti, "Il Lago Maggiore e dintorni con viaggi ai laghi e monti circonvicini"; Isola Bella, p. 101, "Per fondare nell'onda quella serie di solidissime volte, su cui poggia la piramidale scalea dei pensili giardini," with plate, Isole Borromee, facing p. 100, see also p. 103; Isola Madre, p. 105, "Cinque digradanti giardini." The resemblance between the old Roman and the modern Italian style of gardening appears not only in the general arrangement of parterres and flower-beds, but also in the *ars topiaria*, or method of cutting and clipping trees into fanciful shapes. To it Martial alludes, *Epigrams*, III, 19:—"De Vipera in ore Ursae."

"Proxima centenis ostenditur ursa columnis,
Exornant fictae qua platanona ferae."

Dict. Ant., third edition, I, 977. The article *Hortus* ends with an appropriate engraving from a painting at Herculaneum. Compare Pliny the Younger, *Ep.*, V, vi, 16, "Ante porticum xystus concisus in plurimas species, distinctusque buxo." See also *ibid.*, II, 17, "Descriptio villæ Laurentinæ." We may observe in § 9 the phrase *transitus suspensus*, a passage supported by pillars, where the adjective is used with the same meaning as *suspensura* mentioned

above. Overbeck, *Pompeii*, Vol. I, p. 278 *seq.*, "Garten . . . sehr anmuthiger, an der Casa di Sallustio," Fig. 186, and p. 279: "Da zur Anpflanzung von Bäumen und Gesträuchen zu wenig Raum vorhanden war, hat man sich begnügt, einen . . . Sandplatz 24 (plan of the house, Fig. 185, p. 276) mit gemauerten Behältern für Erde zur Blumenzucht zu umgeben und die fehlenden Bäume auf die Hinterwand zu malen, wo sie (jetzt höchlich ruinirt) von zahlreichen bunten Vögeln belebt, die Aussicht zu erweitern und zu begrenzen schienen oder scheinen sollten."

With reference to the construction of the *Limes Transrhenanus et Transdubianus*, I have made some allusion to the character and career of Hadrian. Gregorovius, *Geschichte des römischen Kaisers Hadrian und seiner Zeit*, I, i, 5.

Gibbon, Chap. XII, Vol. II, p. 46, edit. Sir William Smith, without sufficient reason attributes the boundary wall to Probus, who reigned A.D. 276-282; it is one of the comparatively few errors that disfigure his great work. When he says, "Its scattered ruins are universally ascribed to the power of the Daemon," he refers to its popular appellation *Teufelsmauer* (Devil's Wall). For the stories connected with this superstition see Dr. Hodgkin, *op. cit.*, p. 6 *seq.*

I subjoin a brief notice of publications concerning Roman Baths, which may be of some use to those who wish to study their construction. Vitruvius is the chief ancient authority; his work, *De Architectura Libri X*, probably appeared between B.C. 16 and B.C. 13. Among modern compilations a prominent place should be assigned to the *Dictionnaire des Antiquités grecques et romaines*, by Daremberg and Saglio, article *Balneum*, *Balneae* (Βαλανεῖον, λουτρόν), I, 648-664, Figs. 745-769; p. 661, Fig. 766, "Plan des bains de Badenweiler," which are described at length on the same and following page; 663, *Bibliographie*, "Voyez aussi les ouvrages cités dans les notes, relatifs aux bains de Pompéi et d'autres localités."

On p. 662, col. a, *miliarium* occurs—"in baths a narrow vessel for drawing and warming water." It is usually spelt thus, when it has this meaning, but it is the same word as *milliarium* (*sic*) a milestone. In both cases the form of the object is similar, hence the appellation is identical. Vitruvius, V, 10, calls it *ahenum caldarium*: "Ahenum supra hypocaustum . . . ita collocanda uti ex tepidario in caldarium, quantum aquae caldae exierit, infuat," etc. Italian, *caldaria*, French, *chaudière*. Rich., *op. cit.*, s.v. gives from Pompeii an illustration a *miliarium* restored according to the impression which it has left in the mortar of the wall against which it was set; the square aperture underneath is the mouth of the furnace, actually existing, over which it was placed. Some have derived the word from the plant *mikum* (Virgil, *Georgics*, I, 216, "et *milio* venit annua cura") on account of some supposed likeness, but this seems to be erroneous. C. Knight's *Cyclopædia of Natural History*, Millet, s.v. *Sorghum*, Vol. IV, col. 858; Italian, *sorgo*. *Treasury of Botany*, by Lindley and Moore, Part II, p. 1074.

Of all the books on Pompeii with which I am acquainted, Overbeck's is the most useful, containing much information and far more convenient for reference than the works of Mazois and others, so bulky that they require a strong man to lift them. The title is

Pompeii in seinen Gebäuden, Alterthümern und Kunstwerken . . . , 2 vols., large 8vo., with full-page plates and woodcuts intercalated in the text, tables of contents, index at the end, and map on a large scale, "Plan der Stadt Pompeii Resultat der Ausgrabungen von 1748-1865." The parts not excavated are also indicated. For the baths see Vol. I, Section II, Cap. 3, "Die öffentlichen Gebäude, Fünfter Abschnitt, Die Thermen," pp. 186-224, Figs. 138-149. This work has been re-edited by August Mau, who has also written *Pompeii, Its Life and Art*, with numerous illustrations from original drawings and photographs, 1899, one vol., 8vo.; "Baths," Chaps. XXVI-XXVIII, pp. 180-205, Plate V, facing p. 182, Apodyterium of the Stabian Baths, with the ante-room leading from the Palaestra. The bathing establishments at Rome are, as might be expected in the metropolis, much larger than those at Pompeii; but the latter are more interesting and instructive on account of their excellent preservation.

Armamentarium—repositorum armorum—often means a naval arsenal, as in Cicero, *De Oratore*, I, xiv, 62, "Philonem illum architectum, qui Atheniensibus armamentarium fecit" (with Ellendt's note); and Pliny, *Nat. Hist.*, lib. VII, cap. XXXVII, § 125, "Laudatus est . . . Philon Athenis armamentario mille navium." The reading CD, i.e. 400, is preferable. In the *De Oratore*, *ibid.*, we read, "Si huic M. Antonio pro Hermodoro fuisset de navalium opere dicendum." And here we must distinguish between two words which the compilers of some dictionaries have confounded. *Navalia* (νεώπια of Attic orators) were docks, "where ships were built or drawn up," usually in the plural number, which is used by Virgil, *Æneid*, IV, 593, "Diripienteque rates alii navalibus?" but the poets sometimes have the singular. *Dict. of Antiq.*, 3rd edition, s.v. De Vit in his article "*Armamentarium*" says: "Quale item amplissimum illud, quod hodie Venetiis cernitur; *arsenale*." Murray, *Handbook for Northern Italy*, Route 31, remarks that the model-room still contains curious materials for the history of naval architecture; and it has been suggested that some mediæval galleys preserved there might throw light on the construction of ancient triremes.

In Shakespeare's *Othello* the following line occurs:—

"Lead to the Sagittary the raised search."

Act I, Scene 1. See also Act I, Scene 3. C. Knight's Pictorial Edition, cited by Halliwell, Vol. 15, p. 44, note 18, seems to explain correctly. "The Sagittary was the residence at the arsenal of the commanding officers of the navy and army of the Republic. The figure of an archer, with his drawn bow, over the gates still indicates the place."

It would be easy to collect examples showing how Mithraism was diffused in countries far distant from each other, e.g. at Trèves, "Kopf eines Cautopates, Hochrelief. Offenbar ist es der Kopf einer der fackeltragenden Jünglinge, welche neben den Mithrasbildern rechts und links dargestellt zu werden pflegen." Hettner, *Die Römischen Steindenkmäler des Provinzialmuseums zu Trier*, p. 67, no. 114 [XV, 1]: "Pates wird aus dem persischen pāta 'geschützt' erklärt. . . . Für die erste Hälfte des Wortes ist eine Erklärung noch nicht gefunden." Perhaps it is akin to *kaīw*, *kaīwō*,

καύμα, καύσις, καυσία, a broad-brimmed hat to keep off the heat of the sun.

The heterogeneous mixture of emblems in Mithraic monuments may remind us of the *grylli*—"grotesque figures formed of portions of various animals . . . combined into the outline of a single monster."

In addition to the authorities for the worship of Mithras cited in my paper on "Roman Antiquities of the Middle Rhine," *Arch. Jour.*, 1890, XLVII, 378-383, 395, and 402 *seq.*, with two illustrations, "Front and Back of Mithraic Tablet at Wiesbaden," I subjoin the following:—

W. Froehner, *Sculpture Antique du Louvre*, "Mithras," pp. 495-503, with engraving on p. 499, No. 569, "Le grand bas-relief mithriaque du Louvre."

Fr. Cumont, *Textes et Monuments figurés relatifs aux Mystères de Mithra*.

C. W. King, *The Gnostics and their Remains*, p. 49, discussing the connexion of Mithraism with Christianity, remarks that Constantine adopted and retained long after his conversion the figure of the Sun with the legend SOLI INVICTO COMITI as being a personification either of the ancient Phœbus or the new Sun of Righteousness, equally acceptable to both Christian and Gentile. Compare Malachi iv, 2, "But unto you that fear My name shall the Sun of righteousness arise with healing in His wings."

K. B. Stark, *Zwei Mithraeen der Grossh. Altertümersammlung in Karlsruhe; Festschrift zur Heidelberger Philologenversammlung*, 1865.

Last year (1900) the investigation of the Limes was extended to Austria, and results obtained were published by the Kaiserliche Akademie der Wissenschaften, with the title *Der Römische Limes in Österreich*. In this volume Carnuntum, on the right bank of the Danube, west of Presburg, occupies a large space, as it was an important military station, *castra stativa*.

We learn from inscriptions that the fifteenth legion, surnamed Apollinaris, in A.D. 73, under the Emperor Vespasian, built or restored the fort near Deutsch-Altenburg (auf der Burg); and there is evidence from sepulchral monuments that the Romans had occupied the site previously. Carnuntum does not occur in Tacitus, whose history, as now extant, ends with the War of Civilis in Germany, A.D. 70, and therefore the circumstance above mentioned cannot be included in it. On the other hand, the *Antonine Itinerary*, edit. Wesseling, pp. 247, 262 (*bis*), 266, 267, edit. Parthey and Pinder, pp. 114, 123 (*bis*), 127, 128, gives the distances in Roman miles from Carnuntum to Vindobona, 27; to Arrabona (Raab) by different routes, 52 and 55; to Scarabantia (Ödenburg), 38; they are also marked in the *Tabula Peutingeriana*, edit. Mannert, Segmentum IVb, in the upper part of the plate Aequinoctio XIII, Carnunto; etc., but the figures are not exactly the same. *Rom. Limes in Österreich*, col. 47 *seq.*, Cap. III, "Das Strassennetz." Cf. *Notitia Dignitatum Occidentis*, ed. Bücking, Cap. XXXIII, "Dux Pannoniae Primae," p. 99*, [§ I], [B], [4], "Equites Dalmatae Aequinoctiae, [E], [1], Praefectus Classis Histricae Carnunto sive Vindomanae a Carnunto translatae."

This work on the Limes in Austria, from which I have derived some particulars, contains a supplement devoted to inscriptions; the following examples may serve as specimens:—

"C. Cassio Mari | no Vel(ina) Aquil(eia) | filio ann(orurum) VIII et |
Cassiae Proculae | Vel(ina) Aquil(eia) sorori | ann(orurum) XVI |
C. Cassius Aelia | nus (centurio) leg(ionis) [X]V Apol(linaris)
fecit."

Col. 130 *seq.*, engraved Fig. 23.

Here we may observe that the tribe and birthplace of the centurion's son and sister, who were minors, are mentioned, but in his own case omitted. Compare Col. 103, No. 4, and Tafel V, "Die Gräberstrasse."

"A. Eburius | Celer miles | leg(ionis) XV Apol(linaris) | (centuria)
Decci Maxsi(mini ?) | ; vix(it) ann(orum) XXX, | stip(endiorum) VIII |
h(ic) s(itus) e(st). | frater ei | fecit."

Col. 131, engraved Fig. 24 on col. 130.

The Gentile name Deccius is very rare. Perhaps the centurion above mentioned is the same as that in an inscription found at Rome, "C. Deccius Maximus h(eneficiarius) pr(aefecti) urb(is)," *Corp. Inscr. Lat.*, Vol. VI, No. 2680 = 32658. *Beneficarii* were soldiers who had received from their commanding officer some honour or exemption from service, and are opposed by Festus to *munifices* required to perform their usual duties. Cæsar, *De Bello Civili*, mentions them twice, I. 75, "Barbarisque equitibus paucis, beneficiariis suis" (i.e. of Petreius), and III, 88, "Haec erant millia XLV, evocatorum circiter duo, quae ex beneficiariis superiorum exercituum ad eum convenerant." B.F. frequently occurs as the abbreviation of this word, but these letters are also used with different meanings. See Gerard, *Siglarium Romanum*, B.F.—B.F.V., e.g., B.F. LEG. LEG. II, Beneficiarius Legati Legionis Secundae. Orelli, *Inscr.*, No. 3462, SINGVLARIS BENEFIC. TRIBVN., with note 3. Forcellini, s.v., has a copious article, containing several references to Gruter. Compare Wilmanns, *Exempla Inscr.*, Lat. Index XVI. *Compendia Scripturae*, II, 713. *Lapidarium Septentrionale*, Nos. 189, 603, 681, 716.

Among the gravestones at Carnuntum we meet with other words that deserve notice. Fig. 28, *op. citat.*, *Praeconius*, is formed like *Lictorius*, and seems to imply that the *Praecones* (public criers) were a corporate body. Fig. 29, the *imaginifer*, bore the Emperor's image as a standard, the general term being *signifer*. Cæsar, *De Bello Gallico*, II, 25, "Signifero interfecto, signo amisso," in his account of the war with the *Nervii* (B.C. 57), whom he defeated and slaughtered; *ibid.*, chap. 28, "Prope ad internecionem gente ac nomine Nerviorum redacto."

In late Latin the preposition *ex* denotes one who has retired from an office, just as we say *ex-chancellor*. *Aquilifer* is a compound like *imaginifer*. V. Hefner, *Das Römische Bayern in seinen Schrift- und Bildmalen*, 1852, p. 41, XXV, "Denkmal. Aschaffenburg," Taf. IV, Fig. 9:—

EX · AQVILIFERO · LEG ·
I · ADIVTRICIS

and VII, *Index Rerum*, p. 363, col. 2, for other instances of *ex* in

composition. The use of the verb *exanctoro* is similar (Professor Key's *Latin Grammar*, § 1332).

"Vegetius, *De Re Militari*, II, 7, *imaginarii vel imagiferi, qui imperatoris imagines ferunt. Latius tamen accipi videtur, σημειοφόροι*," (De Vit, *Latin Lexicon*, s.v.).

"Vibius Cn(aei) l(ibertus) | Logus | an(norum) XIX, nat(ione) [Er]mundur(us)."

Fig. 30. This inscription corroborates a passage in Tacitus, *Germania*, Chap. 41, where he speaks of the Hermunduri as allies faithful to the Romans, and in the same sentence appears to refer to Aelia Augusta (Augsburg), calling it "splendidissima Raetiae provinciae colonia." Smith's *Dictionary of Greek and Roman Geography* has a good article s.v. Hermunduri by Dr. Leonhard Schmitz; it includes a notice of the contradictory statements made by ancient writers concerning them. This powerful nation may be described roughly as extending from the western mountains of Bohemia to the kingdom of Wurtemberg, or in other words to the Roman Grenzwall that protected the Agri Decumates.

Orelli, in his note on Tacitus, *loc. citat.*, quotes Zeuss D., p. 103, who defines the boundaries of the Hermunduri. "Von der Werra, Elbe, dem Harze und dem Walde Bacenis war das weite Land der Hermunduren umschlossen." He also gives a long extract from Dion Cassius, LIV, 10. The name must have been Ermundurus in the inscription, without the initial aspirate, as there is no room for H on the stone.

Statilius Taurus, a distinguished general in the Augustan age, was Praefectus Urbi and built the first stone amphitheatre B.C. 30.

Cohen, *Médailles Consulaires*, p. 305, No. 159, *Statilia*, says: "Famille inconnue avant l'Empire." This remark is erroneous, but the mistake has been corrected by Babelon in his *Monnaies de la République Romaine*, II, 468 *seq.*: "Marius Statilius commandait la cavalerie lucanienne qui lutta contre Annibal en 538 (216 avant J—C). Plus tard, nous trouverons un L. Statilius compromis dans la conspiration de Catilina." Three coins are mentioned by both writers, e.g. TAVRVS · REGVLVS · PVLCHER. Rev., IIIIVIR. A.A.A.F.F.S.C. ("Triumviri aere argento auro flando feriundo, Senatus consulto"). The *tres viri monetales* were directors of the Mint. Niebuhr, *History of Rome*, English translation, Vol. III, p. 552, places their introduction in the year 477 (483) U.C.

Livy, XXII, 42: "Marius Statilium praefectum cum turma Lucana exploratum mittit (L. Aemilius Paullus)." Other Statilii are enumerated in Smith's *Dict. of Greek and Roman Biography and Mythology*, Vol. III, p. 901.

The importance of Carnuntum is proved by the fact that a Roman fleet which guarded the Danube was for a long time stationed there. Ermanno Ferrero, *L'Ordinamento delle Armate Romane*, 1878, supplies inscriptions relating to this subject, pp. 185–191, Nos. 535–544, "Classis Pannonica—Classis Moesica." *Ibid.*, *Iscrizioni e Ricerche Nuove intorno all' Ordinamento delle Armate dell' Impero Romano*, 1884, p. 64, No. 715.

As a continuation of the work on the *Limes* in Austria, the following part has been just published (April, 1901), *Der römische Limes in Oesterreich*, Heft II, M. von Groller, Gräberfeld bei der

Villa Pálffy — Lager von Carnuntum — Retentura — Praetentura —
Römische Waffen — Strassenforschung, etc., with 25 plates and 50
figures in the text.

In preparing this memoir I have made free use of *Die Römischen
Bäder bei Badenweiler in Schwarzwald, nach der natur aufgenommen
im sommer 1855, und mit rücksicht auf frühere editionen erläutert*,
by Dr. Heinrich Leibnitz, and the Reports of the Obergerm-Raet-
Limes des Römerreiches and of the Römische Limes in Österreich.

THE ARMIGER.

By EDWARD MARION CHADWICK.

In the revival of interest in the Science of Heraldry which has taken place during the latter part of the nineteenth century, the question of how people acquire armorial bearings and by what right they use them has naturally come under a good deal of consideration. There is perhaps no heraldic subject which has been so little understood and has been the subject of so much misapprehension. In its consideration a wide difference of opinion has appeared, some maintaining that armorial bearings are honours, and therefore to be acquired only by Royal grant in the same manner as peerages, knightships and the like. This opinion has its origin in the continental notion, derived by imitation from the social conditions of ancient Rome, that all persons are divided into two classes, "patricians" or "nobles" and "plebeians," and that the patricians or nobles are those who bear arms and the plebeians those who do not. That such a notion, in modern times at any rate, must inevitably lead to absurdities is evident. It is one which does not prevail in England, where the "patrician" and "plebeian" are unknown, and none are accounted "noble" excepting peers. It is true there are some who assert the contrary, but that is merely a fanciful assertion unsupported by any facts of difference in blood or circumstances attending social conditions. There is not, and never has been, any servile class in England, or any distinction caused by difference of nationality or origin except during the period after the Norman "conquest"; but as Normans and Saxons were near akin they soon became fused into one people; and since then the English people have been of but one blood, and the only distinction between classes is that which is caused by individual circumstances. Any person may rise from the

bottom of the social scale to a higher place, and no "ennobling" is required to enable him to do so.¹

Many of those who maintain the opinion that arms can be borne only by Royal grant probably do so more as a matter of expediency than as a matured and well-founded opinion, no doubt considering it advisable to uphold the authority of the officers of arms, and to require that all armorial matters should pass under the cognisance of such officers. In these pages it is proposed to consider matters as they are, and not as either the writer or any other person may think that they ought to be.

Arms are borne by four titles, *viz.* inheritance, grant, transfer, and assumption. The mention of the last will no doubt be greeted by some readers with a note of interrogation, but the explanation of the term, and the reason for its use, will appear subsequently. In mentioning such titles it is usual to include prescription, although some regard that as debatable, but it is here omitted because prescription is founded upon and necessarily derived from inheritance, and forms but a branch of that source or manner of title.

Armorial bearings are a freehold of inheritance descending from father to son. And here we may observe a material difference between heraldic insignia and "honours," properly so-called, for the latter, if not for the life only of the possessor, descended to one person only, to the exclusion of all others, except only in the case of falling into abeyance, which, however, is not really an exception, for one only of the coheirs can inherit, and the abeyance only exists until that one is indicated. But heraldic insignia descend to all the

¹ As the assertion of a royal prerogative in respect of arms is founded upon the continental idea that armorials are honours, it may be interesting to note that in *The Last Colonel of the Irish Brigade*, London, Kegan Paul & Co., 1892, Vol. II, p. 73, apropos of difficulties experienced by Colonel O'Connell at the Court of the King of France, with regard to the rules of Court etiquette and Court privileges, Ross O'Connell, apparently a herald of some skill, explains that a distinction was made between *Pairie* (*anglice*, nobility) and *Noblesse* (*anglice*, gentle-

men), as clear—and the same—as between peers and gentlemen-commoners in England. He says: "The King in France was the fountain of hereditary title, but not the fountain of *noblesse*." In other words, the creation of *noblesse*, even by the King's patent, did not proceed from the "Fountain of Honour." The rank of *noblesse* might be attained independently of any royal act, as in the case of one "ignoble" attaining to public office of sufficient importance to confer the social grade of *noblesse* by the mere fact of tenure.

sons of the possessor, and to all his daughters also ; but in the case of the latter for life only, unless the male descent fails. According to strict heraldic rule, when armorials descend to brothers, all but the eldest should assume differences, but this rule is nowhere observed except in Scotland, where cadets are forbidden to use or display their arms until they have been "matriculated" or entered in the office of Lyon King of Arms, when a proper difference is assigned. But there are few Scottish cadets who consider themselves under obligation to comply with this rule. It is confidently asserted that Scottish heraldry rigidly reserves to the male representative of each family the exclusive right to the undifferenced family coat, and that no Scottish arms of cadets are recognised unless duly differenced. Two instances occur to the writer where this rule has not been observed. The arms of Munro of Foulis, chief of the name, are, *Or, an eagle's head erased gu.* These arms without difference were borne by a cadet of another branch of that family, Sir Hector Munro, installed Knight of the Bath 1779. The arms of Strachan of Glenkindie are, *Az., a stag trippant or, attired and unguled gu.* The same arms are recorded as borne in 1776 by William Strachan, a cadet of another branch, that of Thornton ; and in 1839 by Bishop Strachan of Toronto. In England and Ireland differences are formally assigned where a new branch of a family arises, and desires official recognition, and such assignments are made with but slight regard to nearness or otherwise of relationship to the previously recorded possessor of the arms. In the case of descent of armorials to the daughters, they all take alike and without regard to seniority. If, and so long as, they have a brother or descendants of a brother, they only bear the arms for life, but if they have no brother, or if, having had a brother, all his descendants male and female have failed, then they bear the arms as a freehold of inheritance and transmit them to their own descendants. A woman thus bearing arms is heraldically known as an heiress. Her husband bears her arms on an escutcheon of pretence, and her children bear them quartered with their paternal coat.

Heraldic purists strenuously dispute the right to bear

arms by prescription, and, while admitting that such right is recognised by Irish practice, assert that no arms can exist in England which have escaped notice in the course of the Heralds' Visitations.¹ Although such assertion is by no means conclusive, it may be passed over for the present. But it may be observed, *en passant*, that it is tolerably plain that the heralds in their visitations recognised arms prescriptively borne. In Scotland many armorial bearings have been borne by prescription from time immemorial, and are borne to this day in entire disregard of the statute enacted in that kingdom forbidding the bearing of arms unless registered; this statute we shall have occasion to refer to again. In Ireland arms are entered in Ulster's office on proof of user for three generations, but if they are the same as already recorded as borne, either in that or one of the other kingdoms, a proper difference is assigned.

The term "grant" is commonly used to signify the assigning of arms by some person in authority; but the expression is not accurate. The Crown "grants" lands, as does also a private person, the lands being already in existence and in the possession of the grantor. The sovereign "creates" a title of honour—*creare est aliquid ex nihilo facere*. Arms newly devised might, perhaps, be better spoken of as "assigned," using that word as a technical heraldic term in the sense of designating or appointing. But as the word "grant" is commonly employed, it will be convenient to use it in these pages. A grant of arms may be made by the King, or by any officer deputed or appointed by him for that purpose: this much all heralds are agreed upon as a statement which is not open to question; but there is a difference of opinion as to whether any exclusive prerogative in the Crown to make or authorise such grants exists or not. The writer who uses the *nom de plume* of "X" may be presumed to have said, in his work on *The Right to Bear Arms*, all that can be said in favour of a jurisdiction over armorials being an exclusive royal

¹ And, consequently, that no arms can be borne by a valid title unless officially recorded. But a writer in the *Contemporary Review*, LXXVI,

257, mentions two instances of unrecorded arms borne by heraldic grants, one dated 1590, and the other of about the same date.

prerogative; but he has entirely failed to establish this, for he quotes no authority to show that such prerogative has ever exclusively vested in the sovereign, excepting a recital in a grant of arms by Charles I., which was of no validity, and cannot be quoted as a precedent or authority, for much more than such a recital is and was necessary to change the laws of England; that quotation, therefore, does not close the argument or settle the point.

Now the earliest written statement of the heraldic law of England is the famous *Boke of St. Albans*, printed in the first year of the reign of Henry VII., and supposed to be the printing of a much earlier manuscript work used in the education of the young gentlemen of England. After stating how arms are borne, firstly by descent, secondly by conquest, a manner then used but now obsolete, the *Boke* continues "On the thride maner of whise whe have armys the wich we beere by the grauntyng of a prynce or of sum other lordys." Here we have a statement which is in effect that any person of prominent position, who in feudal days would have retainers of various degree, might grant arms. This law has never been abrogated or altered. Armorial bearings are theoretically of a military character, and therefore it is a reasonable proposition that any person having a military command and power to grant military commissions may, in due consistency with the theory and principles of heraldry, grant arms.¹

This mode of acquiring title to arms is referred to, as the writer is not aware of any good reason for its omission, although it is not now practised, unless, perhaps, by the not unusual condition in wills and settlements requiring a beneficiary to assume the name and arms of the testator or settlor. But there are known instances of persons having transferred their own armorial insignia to others in a manner similar to a

¹ On this consideration, and in view of the fact that armorial bearings (with certain exceptions) are not "honours," the writer has pointed out, in an article published in an American magazine, that arms might be granted to American

citizens who should desire to acquire them in an official manner, by the President of the United States, and, concurrently within his own State, by each State Governor.

conveyance of lands (see Woodward's *Heraldry, British and Foreign*, ii, 402).

Now let us again consult the *Boke of St. Albans*, and we find the following: "The faurith maner of whise we have thoos armys the wich we take on owre awne ppur auctorite. as in theys days opynly we se. how many poore men by thayr grace favoure laboure or deservyng : ar made nobuls. Sum by theyr prudens. Sū bi ther māhod. sū bi ther strength. sū by ther conīg. sū bi od v̄tuys. And of theys men mony by theyr awne autorite have take armys to be borne to theym and to ther hayris of whoom it nedys not here to rehearse y^e namys. Nev^{er} the lees armys that be so takyn they may lefully and frely beer. Bot yit they be not of so grete dignyte and autorite as thoos armys the wich ar grauntyt day by day by the autorite of a prynce or of a lorde. Yet armys bi a mannys propur auctorite take : if an other man have not borne theym afore : be of strength enogh." It is interesting to add the paragraph of the *Boke* immediately following the above: "And it is the opynyon of moni men that an herrod of arnis may gyve armys. Bot I say if any sych armys be borne by any herrod gyvyn that thoos armys be of no more auctorite then thoos armys the wich be take by a mannys awne auctorite."

Here we have a voice, plain and unequivocal, from the palmy days of heraldry in England.

Five years before the book quoted was published (or rather republished, the modern edition being a facsimile of an original black-letter copy, reproduced by photographic process), the writer contributed an article on heraldry to *The Week* (of Toronto, Canada), in which he ventured the opinion that arms might be assumed by any person of his own will, provided two rules were observed, *viz.* the arms must be properly heraldic in design and character; and they must not be the same as, or so similar as to be confounded with, arms already borne by some other person. The observations then made by the writer are closely and quite curiously paralleled by the passage quoted. The opinions expressed, which at the time required some little courage to put forth, were arrived at after careful

consideration of the subject, the writer, however, retaining an open mind and being prepared to accept any good and well founded statement to the contrary, until the appearance of "X's" work, which seemed to him to fail so completely in establishing a contrary opinion, that a perusal of it only tended to confirm his views, in support of which an authority which seems to be conclusive can now be quoted.

It will be urged, no doubt, that a recognition of the liberty of persons to assume arms as they please will lead to heraldic chaos; but that is not the result of experience, for it is a fact which cannot be disputed that many persons have assumed arms, within the past century at the least, and we do not find any such arms (borne by private persons) of an incongruous or non-heraldic character, for those which are of such description have, in fact, been devised by professional heralds and formally granted. It is, of course, very desirable that all arms should be officially registered, but the question of expediency is one thing and the actual state of the law is another. The opinions which may be held by one person or many persons as to what is expedient do not make law.

Those who maintain that arms may be granted only by the King or those authorised by him found their strongest argument on the assertion that armorial bearings are "honours," and therefore proceed from the fountain of honour. But this is altogether fallacious. Armorials may be and often have been honours conferred as such in particular cases, such as honourable augmentations, and certain coats which have been especially granted to mark or record some famous exploit of the bearer. It is one of the common delusions regarding heraldic matters that all arms are what may be termed historic memorials, and many legends have been invented to fit particular coats, but such stories are in most cases mere fairy tales, and the fact is that memorial arms are quite exceptional, and there are very few which can be so classed with any reasonable certainty or even probability. Compared with the vast number of coats (certainly 25,000, perhaps twice as many) borne in the British Empire, honourable augmentations are extremely

rare. It is another delusion which sometimes affects people whose arms are differenced, that the change in their arms, which they perceive but do not rightly comprehend, is an honourable augmentation. Supporters, as they are usually accessories to the arms of a nobleman and are inherited with the title, approach nearly to the status of honours, but not altogether so, because they are frequently borne by corporations (such, for example, as the Hudson's Bay Company, the East India Company, and various others); and in modern times they have come to be regarded as proper accessories to arms of colonial governments, *e.g.* Cape Colony, long borne, but only lately granted, or perhaps rather recognised, for the grant has been made in an exceptional manner; also British Columbia, where the Lieutenant-Governor in Council, about five years ago, assumed arms as an official act, with supporters.

There is another consideration bearing upon the question of the right to assume arms which must receive attention. Long-established custom has the force of law. Disregarding the chivalric era, which has spoken to us through the *Boke of St. Albans*, and passing over the Stuart and Georgian periods of heraldic debasement,¹ it is now a long-established custom, or practice of widely spread usage, to bear arms which are unknown to the Herald's College. There is no law or authority in England or Ireland which can interfere with or prevent any person bearing arms by an assumptive title. If any herald should attempt in these days to impose upon any person any indignity because he chose to bear arms of his own devising, it is the herald whom the law would punish, and not the other.

All persons in England who use armorial bearings are required to obtain a license to do so, and to pay an annual tax; and anyone infringing the law in this respect is liable to a fine. But it must be observed that the Court which imposes the fine makes no inquiry as to the right or title which the bearer has to the armorials

¹ Those periods are well described by Boutell, *English Heraldry*, p. 9, who observes: "No nonsense appeared too extravagant and no fable too wild, to be grafted upon the grave dignity of

the Herald's early science," and that science was "brought into disrepute, and even into contempt, by the very persons who loved it with a genuine but most unwise love."

he uses, but only as to the fact of the use, and the non-payment of the tax.

In the foregoing observations we have made some exceptions with regard to Scotland, for here the right to bear arms has been the subject of parliamentary enactment. In 1662 an Act was passed forbidding "cadents," or cadets, to bear arms unless matriculated and differenced, but this Act was repealed in the following year. Ten years later another Act¹ ordered all persons using arms to give in a description of them, with their lineage, to the Lyon Clerk, so that they might be registered, and that after a year and a day no one should "use any other armes." With regard to this enactment we may observe, first, that it was passed in the period of heraldic decadence; and secondly, that it has been, and is, more honoured in the breach than in the observance, and it is arguable that it has become effete by reason of long non-observance—but on this point the writer does not venture a definite opinion; and thirdly, that it is not in force out of Scotland.

In the preamble of the Act referred to it is recited that "many have assumed to themselves armes who should bear none, and many of those who may in law bear have assumed to themselves ye armes of their Chieff without distinctions, or armes which were not carried by them or their prediceffors." The Statute unmistakably recognises arms borne by prescription—in view of Scottish, and especially Highland, social history, it could not possibly do otherwise—so that the meaning of the reference to those assuming arms "who should bear none" is not very clear. Read together with some following references in the Statute to those "who may in law bear," we may possibly have some suggestion of the notion, sometime prevalent, which connected the bearing of arms with possession of land; or perhaps it may be a vague shadow of the French ideas which had been introduced into Scotland. That it can be intended to refer to any previously defined law or regulation regarding the acquisition and use of armorials is negatived by the whole tenor of the Statute.

¹ This Act was pronounced in 1818 by Riddell, an "eminent legal anti-quary," to be "now nearly obsolete." See *Seaton's Scottish Heraldry*, p. 67.

Whether the Act is still in force or not, it is, at any rate, still the heraldic rule in Scotland that "cadents" or cadets must matriculate their arms and procure differences to be assigned to them; and this rule is also applied, whenever the opportunity occurs, in case of persons of Scottish descent living in the Colonies. Thus, upon a title being conferred upon any such person, it becomes necessary for him to matriculate his arms. Except in such cases there is nothing to prevent any one of Scottish descent living in the Colonies from using the arms of his family as freely as those of other origin may do.

The consideration of this subject unavoidably requires notice of *The Right to Bear Arms*, lately put forth by "X" (to which reference has already been made), and of which a second edition has been issued by him, probably because he has been conscious that the first failed to establish his contention, a position which the second does not greatly amend. It may be advantageous to refer very briefly to two or three of the more important arguments or evidences which he adduces. "X," while without hesitation declaring the Judges of the Courts of Law to be incompetent to adjudicate upon heraldic matters, when their decisions are against his opinions, quotes certain cases which he considers to support his contention, but which on examination do not at all appear to do so. For example, *Joicey-Cecil v. Joicey-Cecil* (p. 146), in which a testator imposed a condition of the taking of his name and arms, and on the occasion for doing so arising, it was discovered that the arms used by the testator were wrongfully used, being those of another person, and consequently incapable of being assumed in compliance with the direction, and it appearing that the testator never used or claimed any other arms, it was held that the condition so far as concerned arms was ineffective and compliance with it not requisite. This case goes no farther than to declare the law that one man cannot acquire title to the armorials of another by assuming or using them. The ancient and oft-quoted contest between Scrope and Grosvenor (p. 40), was also decided upon the principle that one having used certain arms another could not adopt the same or a similar coat.

“X” refers to this case as supporting his contentions of an exclusive royal prerogative, which it does not do, but rather the reverse.

Much stress is laid by “X” upon a warrant of King Charles II., which he quotes (p. 48), granting to a certain person and his wife authority to assume a certain surname and arms, reciting in the document that “neither of which may regularly be done according to the laws of arms without the special dispensation and license of us, as we are by Our Supreme power and prerogative the only fountain of honour.” Such a recital could not override or alter previously existing law or create a new law. Its value may be gauged, first, by the fact that the Stuarts brought into England notions of the Royal prerogative which the English people would not accept, as the troubles of that period amply attest; they were for four generations or more closely intimate with the Court of France, where such notions prevailed to the fullest extent; and Charles II. himself lived for twelve years in France, and his mother was a French princess; secondly, this was the period of heraldic decadence, in which all sorts of absurdities were foisted upon heraldry, leading to the utter debasement into which it fell in the ensuing Georgian period; and, thirdly, the law of England regarding changes of name has been plainly declared by judicial decision to be that anyone who chooses, and does so in good faith, may change his name of his own accord. Therefore if the recital in King Charles’s warrant has not made a change of name illegal or irregular, neither has it made the assumption of arms, not being those of another person, illegal or irregular. Both things are in the same category.

In the opinion of the writer the strongest evidence brought forward by “X” in support of his contention is the early heraldic visitation (*temp.* Henry VIII.) where the King of Arms is commissioned to examine armorials in his province and to deface, etc. arms improperly borne, and to inflict dire punishments and indignities upon offenders; for at this time the debasement of heraldry had only begun. But the tenor of such commissions does not seem to be really more than the

grandiloquent language of the period, for, as "X" shows, the actual execution of their powers by the visiting heralds was done in a very mild-mannered way. It will be well to observe, too, that the heralds were commissioned not only to regulate armorials, but also "to reforme and comptroll" the mourning to be worn at funerals, and in various ways to interfere with the liberties of the King's lieges in a manner which would certainly not be tolerated in a later age—and probably was not generally submitted to even in Tudor times.

The attitude of the heralds in their visitations, while positively picturesque in its terribleness to the contumacious, was most lenient in its practice to the more amenable. And while they maintained an appearance of requiring the very strictest evidence of right to armorial bearings found in use, and of laying down rigid rules by which such right must be determined, in their actual practice they made confirmations easily obtainable by those whose evidence fell short of the standard—even to the extent of gauging their "fees" by the depth of purse of the visited. And in this respect they did right, and their actions were more in accordance with true heraldry than their words. Indeed, it is evident that the heralds themselves often had a truer appreciation of heraldry (and surely have still, though etiquette does not permit them to say so) than their unprofessional advocates.

Professional heralds are understood to be precluded by the etiquette of their office from publicly expressing opinions on such a question as that now under consideration, so that their views can only be matters of conjecture. It may be noted, however, that the late Sir Bernard Burke, Ulster King of Arms, in his work on *Colonial Gentry* recognised many coats of arms as used which are not recorded.

In the preface to *Armorial Families*, by Mr. Fox-Davies, it is stated that twenty-two peers and over thirty baronets "have no right to the arms they bear"; that is, they bear arms not recorded. But those arms are recognised by peerage authors without question. Foster even describes such arms as unrecorded, and he suggests no question as to their validity.

In Seton's *Scottish Heraldry* there is a paragraph (p. 86) which contains what may be assumed to be the opinions of three successive heralds of acknowledged authority, namely, the writer himself, as he quotes with seeming approval, first, Nisbet, a well-known writer of about the beginning of the eighteenth century, and secondly, Camden, a professional herald. The paragraph is as follows:—

“ Besides an elaborate chapter in his larger work, the laborious Nisbet has produced a separate treatise entitled *An Essay on Additional Figures and Marks of Cadency, showing the Ancient and Modern Practice of differencing Descendants, in this (Scotland) and other Nations*. Towards the commencement of the volume he introduces the following advice of the learned Camden, Clarenceux King of Arms in England:—‘ No gentleman ought to bear the differences in Armories otherwise than the office of Armorie requireth, and when younger brethren do marry, erect and establish new Houses, and accordingly do bear their Arms with such a distinction and difference that they might be known from the families from which they are descended, the King-of-Arms ought to be consulted withal, and such differences of houses are to be assigned and established by his privity and consent, that so he may advise them best and keep record thereof; otherwise, gentlemen, by taking unfit brisures, may either prejudice themselves or the principal houses they are come of.’ ‘ This advice,’ adds Nisbet, ‘ is congruous to our law, and consonant to the principles of prudence and reason; and I wish from my heart that our gentry may take more heed to this than hitherto they have done, and may apply to the Lyon office for suitable differences, and not assume them at their own hand, or by the advice of some presumptuous sciolist, whereby oftentimes their posterity suffer prejudice.’ ”

This plainly recognises the fact of the assumption and use of armorials without the aid of those in authority, and does not suggest that a breach of any law is thereby committed; though expressing a desire for heraldic acts being done under competent advice—with which, no doubt, all persons will agree.

Dr. Woodward, perhaps the most learned writer on

heraldic matters of recent time, in his *Ecclesiastical Heraldry* (p. 22) says :

“In our own country (Great Britain) men of all ranks have always been eligible for the highest ecclesiastical positions, and on obtaining them have often, down to the present day, assumed armorial bearings for use upon their seals, etc., though frequently the connection of the prelate with the family whose arms were adopted was, to say the least, extremely difficult of proof. Occasionally permission to use their arms was sought by the prelate from the head and other members of the family to which he desired to attach himself. In France, and probably in other countries, it is usual for a bishop to invent for himself a coat of arms, if he is not entitled by birth to bear one.”

And again (p. 81): “I have alluded to the practice by which a bishop who possessed no armorial bearings by inheritance generally assumed for himself either a coat borne by a family of the same name, from whom he supposed he might have descended, or, and with much greater propriety, an entirely new coat; and this is the custom still both among Anglican bishops and those of the Roman obedience.”

In this work Dr. Woodward describes and illustrates many arms of modern Sees, especially Colonial, which are officially unknown to the Heralds' College, and these are shown *pari passu* with more ancient episcopal armorials.

Dr. Woodward, as he informed the writer, purposed writing a treatise on *The Law and Practice of Heraldry*, and had collected material for the work, but he died before its completion, to the great loss of heraldic literature, to which such a work by so eminent and able a writer would have been a valuable contribution.

Since the foregoing pages went into the printer's hands, the writer has obtained a copy of Hulme's *Heraldry* (second edition, 1897; an excellent work), in which he finds inserted at full length the passages in the *Boke of St. Albans* on the manner in which arms were acquired and rights by which they were borne, of which the parts immediately relating to the subject now under consideration are quoted above. Hulme discreetly

refrains from expressing any opinion of his own, but as he allows the quotations to stand in his work without comment, his silence is eloquent.

Our subject naturally leads to the inquiry being made, Who may bear arms? and it is one which is not very easy to answer. Title by inheritance vests in all descendants of the ancestor, no matter what their social status or condition may be. So that the question is rather, Who may acquire arms? the answer to which involves drawing an arbitrary line somewhere between the worthy and the unworthy; and as all will not agree upon how and where such a line should be drawn, the question becomes one of opinion. In forming such an opinion it should be borne in mind that ordinary armorials are not "honours"—"X" and all his school to the contrary notwithstanding—but merely the insignia by which families may be symbolically or pictorially distinguished from other families. The writer will no doubt be expected to express an opinion, which he therefore does, but speaking only for himself and in a general way, leaving it to others to concur or not as they may think best. The following are those whom he considers to be of sufficient social degree to appropriately bear arms in Canada: Members of Parliament, and of the Provincial Legislatures; officers of the civil service of at least the grade of chief clerk, or, in outside service, of an equivalent grade, such as collectors of customs in important ports, and post-masters of the larger cities; mayors of towns and aldermen of cities, wardens of counties, sheriffs and registrars; professors in the universities, and Masters of Arts; priests of the Anglican and Roman Catholic Churches¹ (there is no equivalent line which can be drawn with regard to ministers of other religious bodies, but they will easily find places in other classification); captains of militia, lieutenants in the Royal Navy and Royal Naval Reserve, and officers of equivalent rank in the colonial naval services; barristers-at-law and solicitors; Doctors

¹ It is held by some heralds that crests, being of an especially military character, should not be used by clergymen. Dr. Woodward, who was the rector of a parish of the Scottish

Episcopal Church, used a bookplate displaying a full achievement; but as he was the chaplain of a knightly order, his case may perhaps be regarded as exceptional.

of Medicine; civil engineers, architects, and land surveyors; bankers, wholesale merchants, and manufacturers; yeomen possessed of lands of the value of \$8,000, and of suitable education (but not farmers¹); and all others who are of liberal education, or of independent means, and of manners so far refined as to admit of their associating on fairly even terms with such persons as are above particularly mentioned.

NOTE ON THE RIGHT TO ARMS DERIVED FROM USER.

From information supplied by Mr. WOLSELEY EMERTON, D.C.L.

That rights are established by user is, in the Civil Law, a rule so notorious that the only difficulty is to choose one's authorities; and it must be noted that (contrary to the general principle of English statutes of limitation) the Civil Law does not only "bar the remedy of an opponent," but actually "confers a right" on the originally wrongful possessor. I give some authorities on this point as I know that antiquaries frequently find themselves compelled by more pressing avocations to leave the Institutes and the Pandects out of the list of their studies.

Institutes, Book II, Tit. 6.

"de Usurpationibus et
Longi temporis possessionibus."

Digest or Pandects, Book XLI, Tit. 3.

"de Usurpationibus," etc.

Gaius, II, 42, 43, 44, 46.

Looking on the right to arms from the civilian's point of view, an unchallenged possession of twenty years at most would be sufficient as a rule.

¹ The "yeoman" is a freeholder, while the "farmer" is one who holds under another, colloquially termed a "tenant," and therefore clearly inferior in social position to the freeholding yeoman. In Scotland it was enacted in 1400 and 1430 that every freeholder should have his proper seal of arms, for

the due execution of documents (Seton's *Scottish Heraldry*, p. 16).

The above qualification of fitness is according to the writer's own ideas of propriety, and that of value of estate is founded upon ancient English ordinances which required that every man possessed of landed estate of a certain value should become a knight.

It is important that the possession should have *begun* in good faith (which is, of course, presumed unless the contrary be proved), but it is not necessary that the good faith should continue till the time of "prescription" has expired.

In the reign of James I. Segar (who was Garter King of Arms), while opposing the view of Bartolus on "Arms by User," thinks it prudent apparently to make considerable concessions to the civilians as a body.

Mr. Round's argument from the wording of the proceedings in the time of Henry V. seems to me conclusive. It was very common in the middle ages to confirm rights which, as a matter of fact, stood in no need of confirmation, such as the right to arms conferred by user.

ON THE CAIRN AND SEPULCHRAL CAVE AT GOP, NEAR PRESTATYN.¹

By PROFESSOR BOYD DAWKINS, M.A., D.Sc., F.R.S., F.S.A.

Introduction.

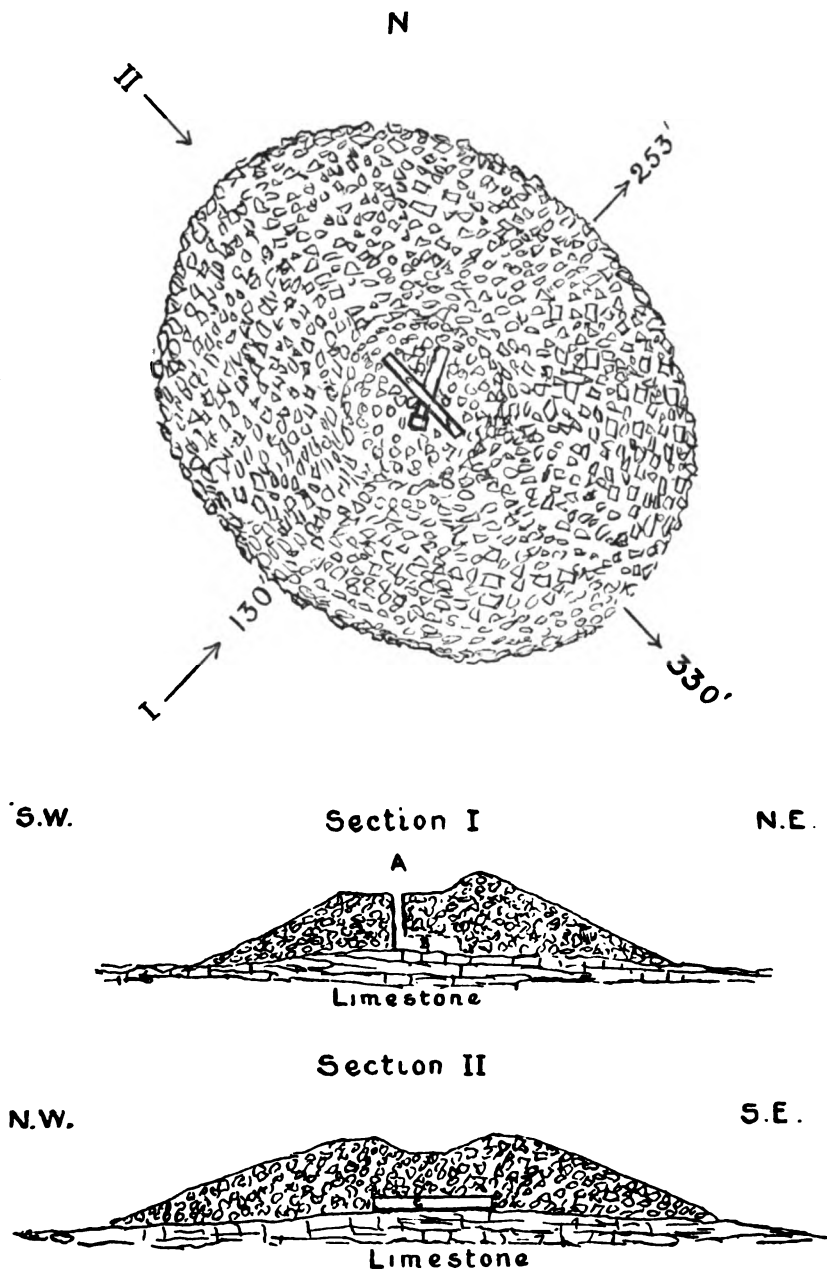
1. The exploration of the cairn at Gop.
2. The sepulchral cave.
 - A. The pleistocene strata.
 - B. The prehistoric accumulations.
 - C. The sepulchral chamber.
 - D. Cave inhabited before use as a burial-place.
 - E. The pottery of Bronze age.
 - F. The links.
 - G. The flint flakes.
 - H. The animal remains.
 - I. The human remains of Iberic and Goidelic type.
 - J. The fusion of the two races.
 - K. The relation of the cairn to the sepulchral cave.

INTRODUCTION.

The cairn at Gop first to be described in the following pages stands in a commanding position, at an altitude of 820 feet, at the northern end of the picturesque line of hills forming the eastern boundary of the Vale of Clwyd. It is about two and a quarter miles to the south-east of Prestatyn, on the London and North Western Railway, and about six miles to the east of Rhyl. It commands a magnificent view, westward over the Vale of Clwyd to the Snowdonian range, northward over the Irish Sea, and eastward over the low-lying plain of Cheshire, to Liverpool and beyond. It is recognised generally in the neighbourhood as a tumulus, and is so described in the Ordnance maps. It is attributed in common talk to Queen Boadicea, in spite of the fact that there is no evidence that the famous queen of the Iceni ever set foot in that region. In 1886 Mr. Pochin, of Bodnant Hall, who had bought the Golden Grove estate, on which it is situated, asked me to undertake the examination of this conspicuous landmark, at his expense. The following are the results of the work carried on in 1886 and 1887, which I have been unable to publish before on account of the pressure of other work.

¹ Read June 5th, 1901.

ON THE CAIRN AND SEPULCHRAL CAVE AT GOP. 323



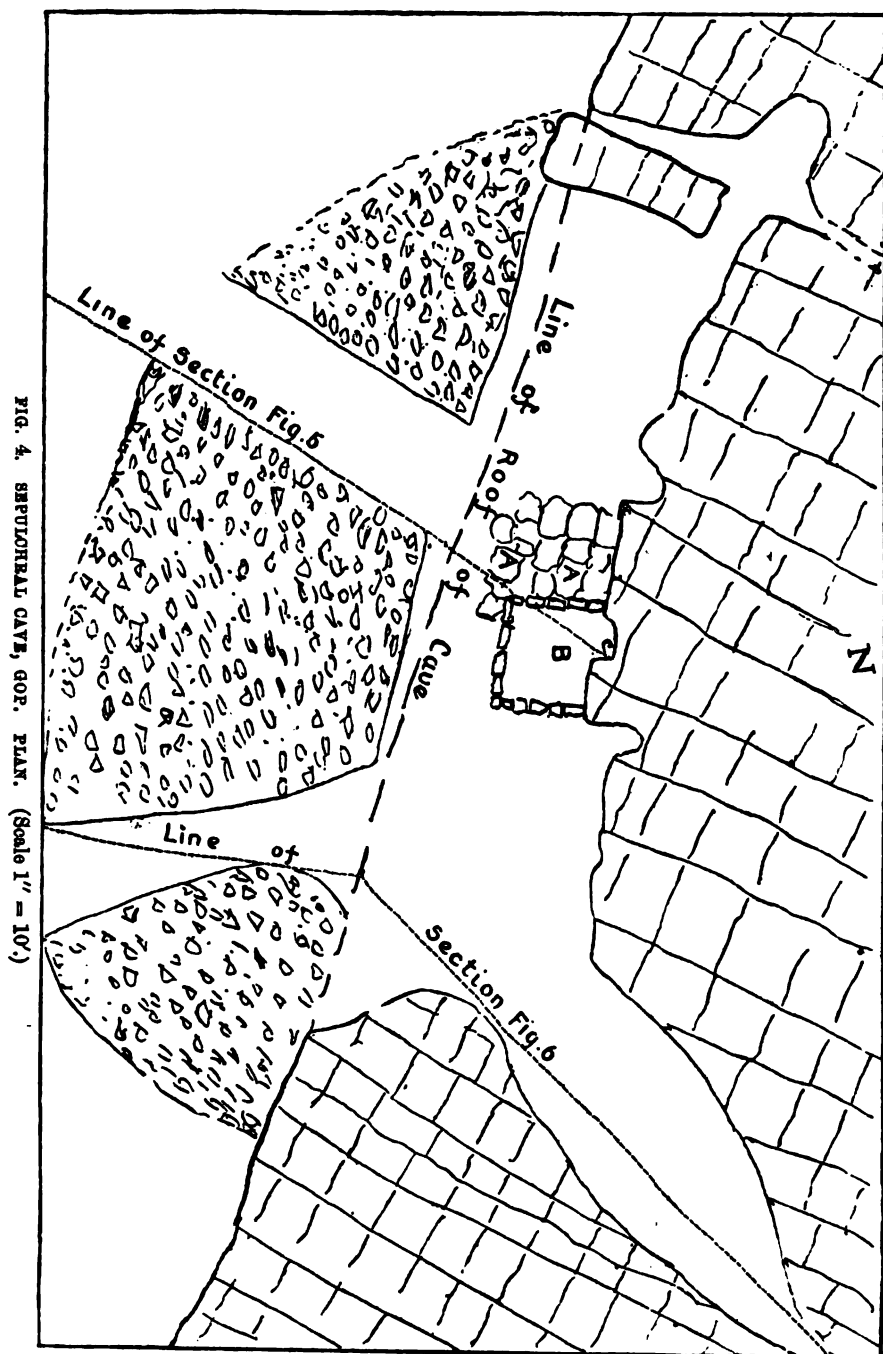
FIGS. 1, 2 AND 3.—CAIRN AT GOP. PLAN AND SECTIONS.
(Scale 1" = 100'.)

1.—THE EXPLORATION OF THE CAIRN AT GOP.

The cairn is composed of blocks of limestone, of a size easily carried, piled up so as to form an oval, with its long diameter 330 feet, pointing from north-west to south-east, and its short diameter 223 feet, from north-east to south-west (see Plan and Sections, Figs. 1, 2, 3). It is 46 feet high, with a truncated top, which may be due either to the removal of the stone for making field-walls, or by the giving way of a chamber in the area immediately beneath it. It rests on solid limestone rock.

The exploration was begun by sinking a shaft (6 feet 6 inches by 4 feet) in the centre, an operation of considerable difficulty on account of the instability of the limestone blocks, down to the solid rock forming the original surface of the ground. It was found necessary to use heavy timbers to allow of the work being carried on. The original surface was struck at a depth of 26 feet (see Figs. 1, 2, 3). A drift was then made, 6 feet high and 4 feet wide, in a north-easterly direction (B of Figs. 1 and 2) to a distance of 30 feet, following the original surface of the rock. Two other drifts were also made, C, C, intersecting B in the line of the Section Fig. 3. The only remains met with were a few bones of hog, sheep or goat, and ox or horse, too fragmentary to be accurately determined. They are, however, of the refuse heap type usually found in prehistoric habitations and burial-places. We failed to obtain evidence of the archæological age, or of the purpose to which it was put. If, as is usually the case, there was a central burial-place, we missed it. The question cannot absolutely be decided until the whole of the stones have been removed. The timbering necessary for our work was not only very costly, but rendered it very difficult to observe the condition of the interior even in the small space which was excavated.

Gop Cairn is probably sepulchral, similar to that in the same range of hills to the east, near Mold, used for years as a stone quarry, in which, in 1832, a skeleton was discovered lying at full length, clad in a golden corselet, and adorned with 300 amber beads. If it be a burial-place its large size implies that it was raised in memory of some chieftain conspicuous above his fellows.



2.—THE SEPULCHRAL CAVE.

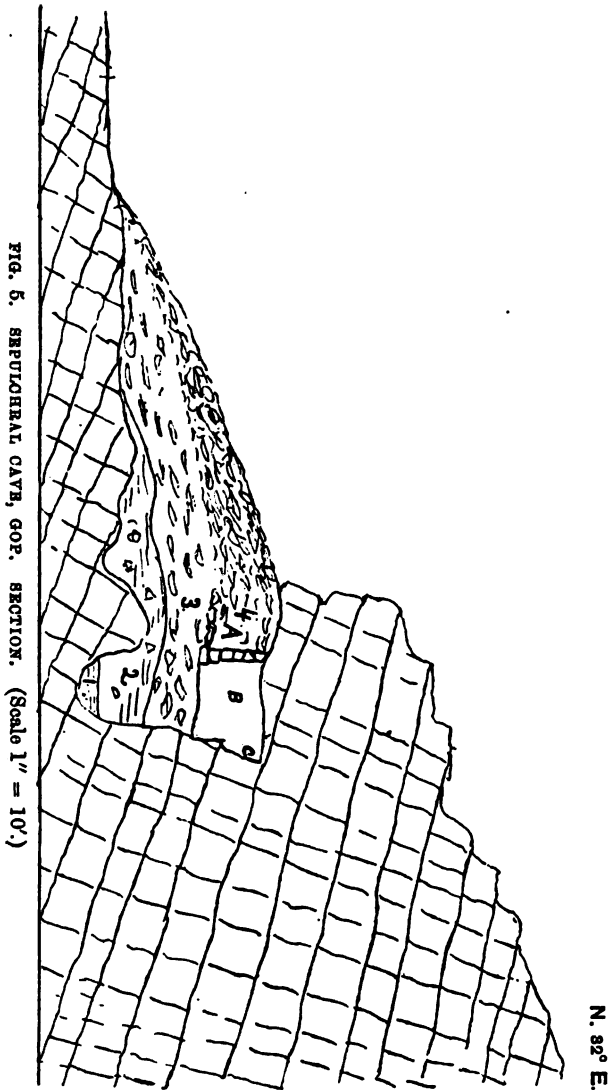
While the cairn was being explored my attention was attracted to a fox-earth at the base of a low scarp of limestone 141 feet to the south-west of the cairn. It occupied a position which I have almost invariably found to indicate the presence of a cavern used by foxes, badgers, and rabbits as a place for shelter. I therefore resolved to explore this, with the assistance of Mr. P. G. Pochin. The fox-earth led us into a cave completely blocked up at the entrance by earth and stones (Figs. 4, 5, 6) and large masses of limestone, which had fallen from the ledge of rock above. This accumulation of débris occupied a space 19 feet in width, and extended along the whole front of the cavern (see Fig. 4).

We began operations by cutting two driftways, down to the surface of the rock. We then proceeded to clear out the whole of the interior of the cavern, which was filled very nearly up to the roof with débris. It consists of a wide rock-shelter, passing into a narrow passage at the north-eastern and north-western ends. It faces very nearly due south. It contained deposits of various kinds and of widely different ages, the two lower being pleistocene, while the two upper yielded remains which prove that they belong to the prehistoric period. I shall consider these in some detail.

A.—*The Pleistocene Strata.*

On the rocky floor of the interior of the cave, strewn with large blocks of limestone, was a stiff yellow clay, No. 1 of Sections (Figs. 5, 6) from 1 to 2 feet thick, containing angular stones and pebbles, some of which are derived from rocks foreign to the district, and occurring only in the boulder clay, which lies in irregular patches on the hillsides in the neighbourhood. It contained neither the remains of man nor of the fossil mammalia found in the caves in the Vale of Clwyd.

— Above this, and also within the cave, was a layer of grey clay, No. 2 of Sections, containing stones, angular and water-worn, and some of foreign derivation as before.



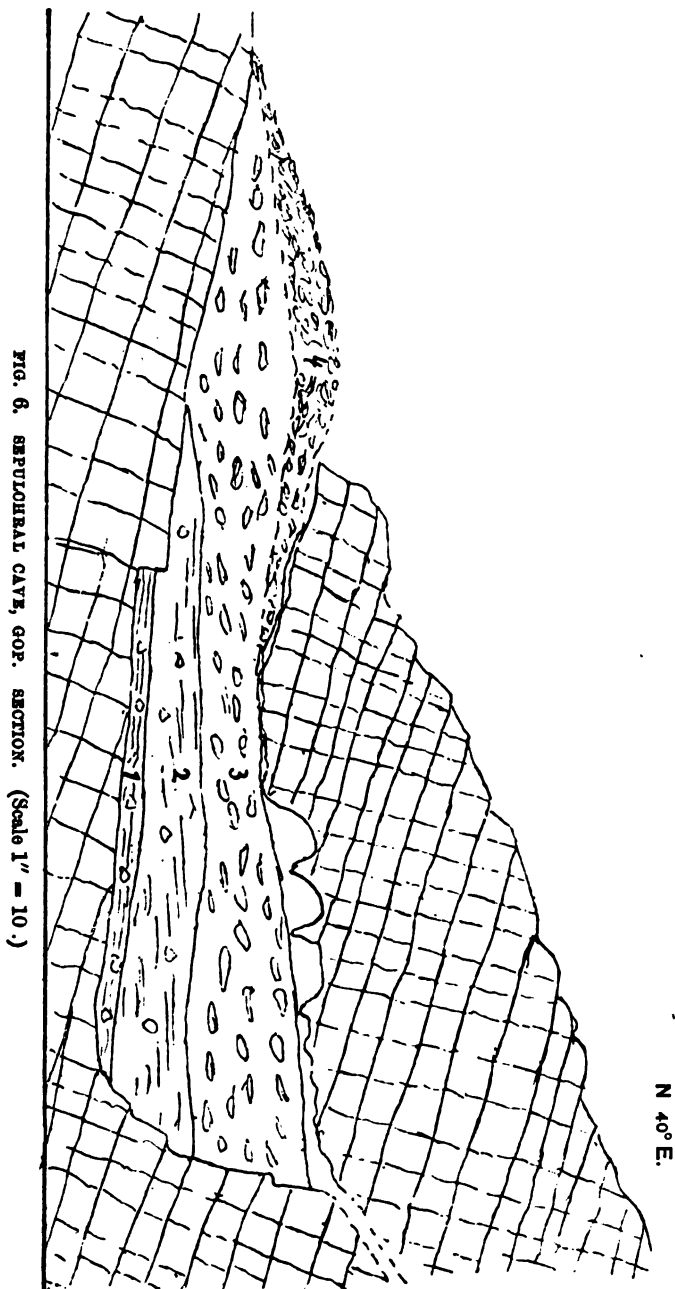
In addition to these there were water-worn, and in many cases perfect, remains of the following animals :—

Cave-hyæna	<i>Hyæna spelæa.</i>
Bison	<i>Bison priscus.</i>
Stag	<i>Cervus elaphus.</i>
Reindeer	<i>C. tarandus.</i>
Roedeer	<i>C. capreolus.</i>
Horse	<i>Equus caballus.</i>
Woolly rhinoceros ..	<i>Rhinoceros tichorhinus.</i>

Some of these, and more especially the antlers of the reindeer, bore the teeth marks of hyænas, and had evidently belonged to animals which had fallen victims to those bone-eating carnivores. They did not, however, occur in layers on the floors, occupied at successive times by the hyænas, as I have observed in other caves, such as Wookey Hole near Wells, and the Creswell caves near Worksop. They appear to have been washed out of the original hyæna floors by the action of water, and to have been redeposited at a time later than the occupation of the cave by hyænas.

B.—*The Prehistoric Accumulations.*

The upper surface of the grey clay, No. 2 of the Sections, Figs. 5 and 6, passed insensibly into the accumulation above, in which the interest principally centres, as it marks the position of the ancient floor of the cave in prehistoric times. It extended nearly horizontally inwards, from a little beyond the entrance to the inner walls of the cave, composed either of limestone or of breccia. On this rested a mixed layer of red earth, broken stalactites, and stones, No. 3 of Sections, containing a mixture of refuse bones of prehistoric age together with those of pleistocene animals such as reindeer and hyæna, obviously derived from the layer below. Pieces of charcoal were scattered through its mass, together with pot-boilers and fragments of pottery. These were, however, less abundant in the lower portion (No. 3 of Sections), which was about 3 feet thick, than in the upper (No. 4 of Sections), where in some places there was sufficient charcoal to blacken the accumulation. This upper layer was about 4 feet thick at the entrance of the cave, shown in section Fig. 5,



where it abutted directly on a sepulchral chamber B. In the section shown in Fig. 6, it was thickest outside, thinning away outwards to the edge of the talus, and inwards into the cavern.

As we were clearing a passage inwards, along the line of Section No. 5, a thick layer of charcoal, marked A on the Plan, Fig. 4, covered slabs of limestone at a depth of 4 feet from the surface, and marked the site of an old fireplace. There were similar blackened slabs, at various levels, in the strata Nos. 3 and 4, in other parts of the area excavated. There were also numerous burnt and broken bones of domestic animals and fragments of coarse pottery. Intermingled with these were a large quantity of human bones, of various ages, lying under slabs of limestone, which formed a continuous packing up to the roof. On removing these a rubble wall became visible, regularly built of courses of limestone. This turned out to be the west wall of a rectangular chamber, B of Figs. 4 and 5, three outer sides being formed of similar rubble walls, while the fourth was constituted by the inner wall of the cave. They enclosed a space 4 feet 6 inches by 5 feet by 4 feet. Inside was a mass of human skeletons of various ages, more than fourteen in number, closely packed together, and obviously interred at successive times. Along with them were the fragments of a rude hand-made pot, ornamented in the herring-bone pattern of the Bronze age, and showing in its fractured surfaces small fragments of stone sticking out of the paste. A few white quartz pebbles, or "luck stones," two links of Kimmeridge shale, and a carefully polished flint flake were also found, the three last in one group.

C.—*The Interments.*

The bodies had been interred in a crouching posture, with arms and legs drawn together and folded. In several cases the long bones lay parallel to one another—the left humerus and left fibula, the left ulna, the right tibia, and the right femur, the left humerus, left radius, and right fibula—of the same individuals. Some of the bones were in an oblique position, approaching to the

vertical. It is obvious that so large a number of bodies as fourteen could not have been buried in so small a space at one time, although it is clear from the natural position of the bones, in one case of an ankle, and in the other of a spinal column, that the whole body had been buried. The bodies, therefore, have been buried at successive times, and the sepulchral chamber is to be looked upon as a family vault. When it became full of bones the area A of Figs. 4 and 5 was used for burials, as I found to be the case with the approaches of the stone-chambered tombs on the opposite side of the valley, near Cefn, described in the *Ethnological Journal*, 1871.

In my opinion the access to the sepulchral chamber was on the west side, in the direction of A of Plan, Fig. 4.

D.—*Cave used for Habitation, and afterwards for Burial.*

On clearing this portion of the cave, we found the section to be as follows :—

				ft.	in.
4. Dark cave earth	..	..	..	3	6
3. Mixed cave earth	..	..	..	3	0
2. Grey cave earth	..	..	..	3	0
1. Stiff yellow clay	..	..	..	1	0

The stratum No. 4 extended up to the roof of the cavern, and abutted directly on the sepulchral chamber, while No. 3 passed directly underneath it. We may, therefore, conclude that here, as in the sepulchral caves of Perthi-Chwareu and Rhos digre, near Llandegla, in Denbighshire, the cave was used for purposes of habitation before it was used for burial, while it is an open question whether the accumulation No. 4 belongs to the time of the interments. It is probable, however, that the sepulchral chamber was excavated out of it. It is not likely that the same place would be used by the same tribe for habitation after it had been used as a tomb.¹

¹ These are two out of a group of five caves of the Neolithic age, explored by me in 1869-1872, and described in *Cave-hunting*, Chap. V.

E.—*The Pottery.*

The fragments of pottery are of types repeatedly met with in interments in Britain belonging to the Bronze age. All are hand-made, coarse, grey in colour, or black, or burnt red, and contain small fragments of stone imbedded in the paste. One specimen found in the refuse heap has a bold overhanging rim, bevelled off on the outside, and adorned with herring-bone marks; below this is a shoulder indented with a single row of circular finger marks, the body of the vessel being in addition ornamented with at least two horizontal lines of small triangular impressions. With the exception of

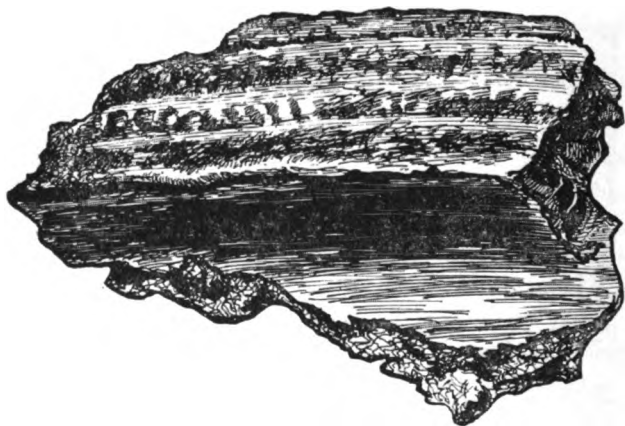


FIG. 7. FRAGMENT OF URN. (Full size.)

the last feature it is of the same type as that figured by Hoare in *Ancient Wilts.*, and described by Thurnam in *Archæologia*, XLIII, 61.

The fragments of pottery found inside the sepulchral chamber belong to an urn with an overhanging rim (Fig. 7), adorned with herring-bone pattern both on the outside and on the inside. A small fragment of the same vase proves also that the body was ornamented with four horizontal bands of oblique lines making two complete herring-bone patterns. The urn to which it belongs is of a type common in interments and refuse heaps of the Bronze age throughout the British Isles.

F.—*The Links.*

Two oval articles found close to the ground flake inside the sepulchral chamber and resembling links (Fig. 8), are made of jet, or Kimmeridge coal. They are carefully rounded and polished, and each has a large oval perforation in the centre. They are of unequal size, and present the following measurements :—

		mm.		mm.
Length	..	54	..	70
Width	..	22	..	29
Height	..	16	..	27
Perforation	..	29 × 14	..	33 × 15

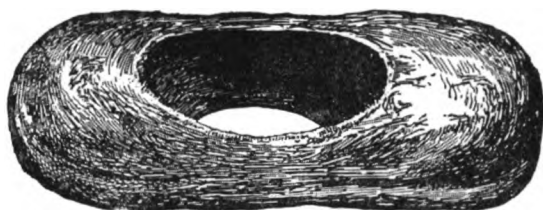


FIG. 8. LINK OF JET OR KIMMERIDGE COAL. (Full size.)

In both the perforation has been formed by scraping, apparently with a flint flake. On neither is there any trace of wear. They were probably intended for dress fasteners. They are of the same pattern as that figured by Thurnam in *Archæologia*, XLIII, 229, Fig. 206, from a round barrow at Thixendale, in the East Riding of Yorkshire, where it was found under the hip of a doubled-up skeleton, and practically under the same conditions as those under notice. It is assigned by Thurnam to the Bronze age.

G.—*Flint Flakes.*

Several splinters of flint, and one rough flake of chert, were discovered in the refuse heap, and need no further notice. A flint implement, however, found inside the

sepulchral chamber is of a rare type. (Fig. 9.) It rested close to a doubled-up human femur, tibia, and fibula. It is a smoothly polished flint flake, 71 mm. long, 14 to 19 mm. wide, and only 3 mm. thick. It has been made by grinding down a flake so as to preserve the natural curvature of the flat side, and to remove the rib on the back, and to give it the appearance of the blade of a paper knife. The edges are bevelled bluntly off, and the end is rounded. Similar objects have been met with, as Evans points out (*Ancient Stone Implements*, 290-291), in Yorkshire. Their use is uncertain. The association of an implement of this type with Bronze age pottery in this sepulchral chamber fixes the archæological age of the whole group.

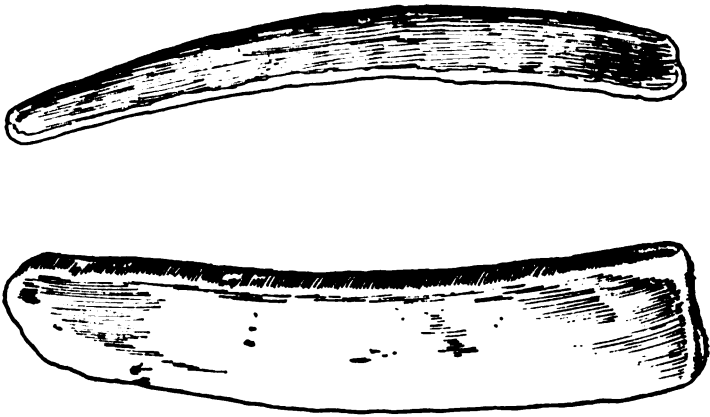


FIG. 9. FLINT FLAKE. (Full size.)

H.—*The Animal Remains.*

The remains of the animals found in the two upper strata, 4 and 5 of Figs. 4 and 5, consist of the wild and domestic animals usually associated together in pre-historic refuse heaps. All are more or less broken and burnt. The wild animals of the following list need no special notice. It may, however, be remarked that the fox was an inhabitant of the cave up to the time of our

digging, and that the remains of the horse may belong to a domestic and not to a wild form.

PREHISTORIC REMAINS FROM REFUSE HEAP.

Wild.

Fox	..	..	<i>Canis vulpes.</i>
Marten	..	..	<i>Mustela martes.</i>
Badger	..	..	<i>Meles taxus.</i>
Horse	..	..	<i>Equus caballus.</i>
Stag	..	..	<i>Cervus elaphus.</i>
Roe	..	..	<i>C. capreolus.</i>
Hare	..	..	<i>Lepus timidus.</i>

Domestic.

Dog	..	..	<i>Canis familiaris.</i>
Horse	..	..	<i>Equus caballus.</i>
Shorthorn	..	..	<i>Bos longifrons.</i>
Sheep	..	..	<i>Ovis aries.</i>
Goat (?)	..	..	<i>Capra hircus.</i>
Hog	..	..	<i>Sus Scrofa.</i>

The remains of the domestic were greatly in excess of those of the wild animals, and the most abundant were those of the sheep. These, as may be seen by the following table, based upon the valuable observations of the late General Pitt-Rivers, belong to a breed closely allied to that of the Romano-British villages of Woodcuts and Rotherley,¹ as well as to the recent breed of St. Kilda, the Highland, and the Heather sheep.² They were, however, thicker in the leg. They are now represented by the active and slender-legged hill sheep.

¹ *Excavations in Cranborne Chase*, Vol. I, table, p. 188, Vol. II, table, p. 225.

² *Op. cit.*, Vol. II, table, Sheep, p. 209 et seq.

TABLE OF MEASUREMENTS OF LEG BONES OF SHEEP.

	Length.	Least Circumference.	Long diameter of Proximal Articulation.	Short diameter of Proximal Articulation.	Long diameter of Distal Articulation.	Vertical measurement of Distal Articulation (tape).
Metacarpals, Gop cave {	137	48	23	18	27	33
	125	40	22	16	24	31
	125	40	21	15	25	25
	112	40	20	13	22	25
Average	127	42	21	15	24	28
Metatarsals, Gop cave {	126	56	18	—	22	28
	125	38	20	20	23	30
	122	33	20	19	21	25
	114	37	18	18	22	25
Average	122	36	19	19	22	27

	Romano-British Villages.				Average.	Dorset Horned Ram.	Hampshire Ewe.	St. Kilda Ram.	St. Kilda Ewe.	Highland Ewe.	Heather Ewe.
	Woodcuta.		Rotherley.								
Metacarpals :											
Length	137	113	137	109	124	136	139	112	107	119	111
Least circumference	39	32	42	44	39	55	49	36	34	39	36
Metatarsals :											
Length	139	114	126	119	124	147	150	124	115	128	116
Least circumference	34	30	32	29	31	53	49	34	32	38	34

The remains of the hog belong mostly to very young animals. The same remark applies also to the remains of the Shorthorn. Those of the dog were too imperfect to allow of any conclusion as to the breed.

The whole group of domestic animals is identical with those which I have described from the Neolithic caves and burial-places in the district. It is also just such an accumulation as may be found in the refuse heaps, in the homesteads in those parts of Wales into which the larger breeds of sheep and cattle, common in the low country, have not yet penetrated. This fact establishes a continuity of farming operations in Wales, from the Neolithic age through the Bronze and Iron ages down to the present time. This continuity, as we shall presently see from the examination of the human remains, exists also with regard to the farmers, the great majority of the human remains belonging to a race still represented by the small dark Iberic folk of the secluded villages.

I.—*The Human Remains of the Two Races.*

The human remains belong to more than fourteen individuals. The skulls sufficiently perfect for measurements reveal the presence of two distinct anthropological types; the one, as shown in the accompanying table, belonging to the long-oval-headed race, proved, by my discoveries in the sepulchral caves and tombs, to have inhabited the district in the Neolithic age. The chief characters observable in the skulls are the mark of a vertical bandage across the head from ear to ear. The forehead is well developed, cheek-bones inconspicuous, nasals prominent, chin square and narrow, tending in some to a point. In one old adult the frontal suture is open.

	Length.	Breadth.	Height.	Cephalic Index.	Height Index.
	mm.	mm.	mm.	mm.	mm.
1 Skull, sepulchral chamber, Gop	186	139	142	·742	·763
2 " " " " " "	196	135	155	·688	·790
5 " " " " " "	191	137	—	·712	—
Average " of 8 " skulls, Perthi Chwareu cave ¹	180	140	143	·765	·784
Skull from Cefn caves ¹	188	145	132	·770	·702
Average of 4 skulls, Cefn tumulus ¹	187	141	148	·754	·791

¹ Dawkins, *Cave-hunting*, Description of Human Remains, by Prof. Busk, pp. 166-187.

The second type is represented by two fragmentary skulls, Nos. 3 and 6 of the following table :—

	Breadth.	Least Frontal Breadth.	Greatest Frontal Breadth.	Parietal Breadth.	Frontal Arc.	Parietal Arc.
No. 3 Round skull, sepulchral chamber, Gop	152	95	113	152	135	127
No. 6 " " "	155	107	134	154	150	152
No. 1 Long-oval skull	139	101	118	134	127	122
No. 2 " " "	135	97	113	145	127	117

No. 3 belongs to a woman and presents the facial characteristics of the round-headed type, being prognathous and having high cheek-bones. No. 6 is an adult male. Both belong to the round-headed Goidels, the invaders of Britain in the Bronze age, whose tombs prove that they penetrated into the remotest of the British Isles in the western sea. Nos. 1 and 2 are placed in the table for comparison.

The skeletons present the following characters :—The humeri sufficiently perfect to be examined are thirteen in number, out of which two are perforated at the same point immediately behind the ulnar articulation. The seven ulnae and the four radii present no points of interest. Their dimensions are given in the following table :—

	Length.	Least Circumference.	Horizontal Measurement of Proximal Articulation.	Vertical ditto.	Horizontal Measurement of Distal Articulation.	Vertical ditto.
Humerus	359	69	69	69	49	49
	324	64	61	59	41	41
Ulna	293	46	—	—	—	—
	145	41	—	—	—	—
Radius	267	44	—	—	—	—
	269	47	—	—	—	—

The femora, twelve in number, are all carinated with the exception of three, and agree in every particular with those found in the Neolithic tomb at Cefn, and the Neolithic caves at Perthi Chwareu and Rhos digre (*op. cit.*, pp. 166, 187). The carination is a character which stands in close relation to the platycnemism which is presented by the associated tibiae. Their dimensions are as follows :—

	Length.	Least circumference.	Horizontal Measurement of Proximal Articulation.	Vertical ditto.	Horizontal Measurement of Distal Articulation.	Vertical ditto.
1 Femur right, not carinated	465	87	97	89	—	41
2 Femur left, carinated	508	72	107	95	82	46
4 Femur right, carinated	440	87	—	—	—	41
3 Femur right, carinated	508	97	84	97	—	31

The following are the measurements of the tibiae :—

	Length.	Circumference.	Vertical Diameter of shaft at 38 mm. below Proximal Articulation.	Transverse ditto.
1 } 2 } 3 } 4 } 5 } 6 } 7 } 8 } 9 } Normal tibia	361 422 422 — — — — — — —	79 89 89 — — — — — — —	36 38 36 32 34 36 33 33 33 28	23 24 23 18 20 23 22 17 33

Only two out of the thirteen tibiae examined were not platycnemic, and one of these belonged to a young individual. The flattening of the bone is of the same order as that presented by the Neolithic remains found in the caves at Perthi Chwareu and the cairn near Cefn described and figured in my work on *Cave-hunting* (pp. 167 *et seq.*). It consists of a prolongation of the shaft, sometimes in front, and at other times behind the long axis of the bone, and is, as Professor Busk pointed out in 1871 (*Journal of Ethnological Society*, January, 1871), due to the free use of the feet, never trammelled by shoes or sandals, and therefore more prehensile than the normal foot of civilisation. It is not a character of race, being found in the negro, in the Mongolian tribes of North America, and rarely in Europeans. It goes with bare feet. If the last two figures in the above table be compared with the rest, the difference will be seen between the normal tibia and those which are flattened "en lame de sabre."

The most perfect of the fibulae is 262 mm. long with a circumference of 30 mm.

J.—*The Fusion of the Two Races.*

It is obvious from the above anthropological details that the great majority of the people who used the Gop cave as a family vault were of the same physique as the Iberic dwellers in the district in the Neolithic age, and from the presence of the round-headed Goidelic type that the fusion of the Iberic with the Goidelic race had already begun in this district in the Bronze age. It is the first observed case of the fusion of the two races which has been going on in Wales from that time to the present day. Before, however, the fusion between the two races became so complete as to form a people like the Celt-Iberian, the Brythonic invaders conquered alike the Goidel and the Iberian in this region, and absorbed them into their mass so that all became one people. Just as the Iberic tongue has been so completely lost in the Goidelic that no clear trace of it is to be found in Wales, so the Brythonic gradually displaced the Goidelic with the exception of a few place and river names, and Welsh and

not Gaelic became the speech of the country. It is not a little remarkable that in all this flux and change, ranging over an unknown series of centuries, the small dark Iberic aborigines of the Neolithic age should have lived on with but little physical change, so as to be still clearly marked off from the races who have invaded them at successive times.

K.—*Relation of Cairn to Sepulchral Cave.*

Two questions naturally arise. What is the relation of the cairn to the sepulchral cave a short distance below it? Were the cairn builders the same people who buried the dead in the cave? In my opinion it is most probable that the cairn marks the site of the burial-place, and that both belong to the Bronze age and to the same people.

NOTES UPON CLAY TOBACCO PIPES OF THE SEVENTEENTH CENTURY FOUND IN BRISTOL.¹

By F. G. HILTON PRICE, D.R.S.A.

Since I had the pleasure of reading a paper before this Institute in 1900 upon "Some early Clay Tobacco Pipes found in the City of London" I have had the good fortune to receive from Mr. John E. Pritchard, F.S.A., a very interesting account of some early tobacco pipes of the seventeenth century found in the City of Bristol during recent excavations. In addition to this information he has kindly presented me with some excellent examples of these pipes, which bear upon the heels either the names of the makers or their initials, and he has further most kindly given me permission to exhibit and publish these pipes as a supplement to my previous paper. In that paper I remarked that in order to definitely fix the dates of the manufacture of the pipes it was necessary that a thorough investigation into the records of the pipe makers in various places should be undertaken, as had been done by Mr. Thursfield in the parish registers of Broseley, in order to ascertain when the makers lived, together with the marks they used.

I am glad to be able to state that Mr. Pritchard has been searching the lists of the burgesses of the City of Bristol and has made some valuable discoveries concerning pipe makers in that city. Excavations appear to have been proceeding, and in some rubbish pits he has found many pipes, together with Bristol farthing tokens of 1652, a piece of Delft pottery dated

¹ Read July 3rd, 1901.

1647, and a brass seal top spoon, all corroborating the dates of the pipes.

All the pipes sent to me belong to the middle of the seventeenth century, and the best known makers of whose handicraft he has found specimens are various members of the Hunt family, *i.e.* Thomas Hunt, John Hunt, Jeffry Hunt, and Flower Hunt.

In my former paper, when describing pipes bearing the names of Thomas and John Hunt, I remarked that these Hunts had a factory in the vicinity of Bath in the early part of the seventeenth century, and that these pipes belong to the period covered by the reigns of James I. to Charles II. Thus it will be seen that I was not far out in their date; but I was wrong as to the locality of their factory.

The specimens then exhibited and since figured in the *Journal*¹ are of the same shape as those now shown from the Bristol find, but are nearly double the size.

Three of these Hunts, *i.e.* Jeffry, John, and Flower, were admitted freemen of the City of Bristol in 1651; and another pipe bearing the name of Nathaniel Howell on the heel is precisely of the same form and size as the foregoing, and from the list of burgesses it is seen that he was also admitted to the freedom in 1651.

In addition to these Mr. Pritchard found examples of the pipes of other makers—Thomas Smyth, admitted a freeman in 1651, who placed his initials T.S. on the heel; Philip Edwards, whose mark was P.E., admitted in 1649, and his son in 1680; Humphry Partridge, H.P. on the heel, admitted in 1650; and a few others whose initials and marks have not yet been identified.

The following is a list and description of the pipes exhibited:—

I will begin with those made by the Hunts, as they are all of the same form and like those found in London by the same makers. These pipes are of elegant shape, with a graceful lean back from the heel.

John Hunt, admitted a freeman of the City of Bristol, 23rd May, 1651.

¹ LVII, 224-240.

His mark is

IOH
N·HU (Fig. 1.)
NT

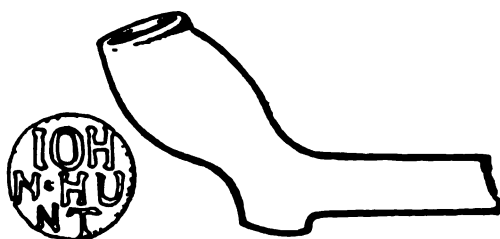


FIG. 1.

Flower Hunt, admitted a freeman 23rd May 1651. His
pipes are marked FLO
WER·H and FH. (Figs. 2, 3.)
VNT

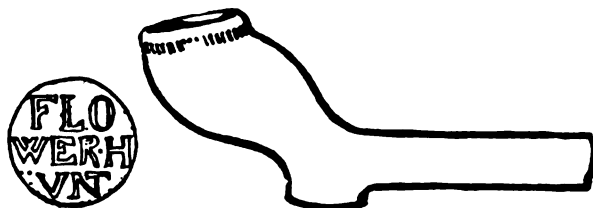


FIG. 2.

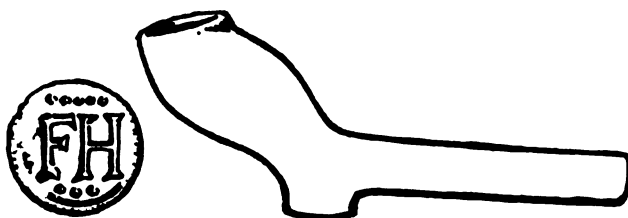


FIG. 3.

Jeffry Hunt, admitted a freeman in 1651. His mark is
IEF IER
FRY·H (Fig. 4), which must be the same as RYH shown
VNT VNT

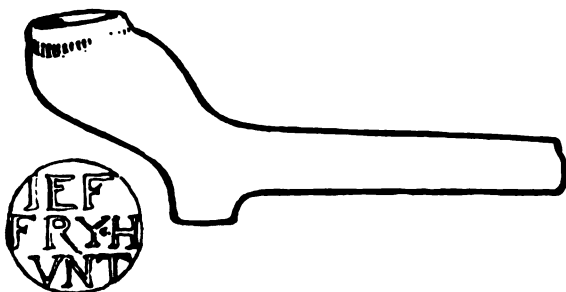


FIG. 4.

on p. 105 of *Jottings in the Stonehenge Excursion*, 1876, by the late Edward T. Stevens, F.S.A., the name Jerry being incorrectly drawn.

Another specimen by probably the same maker is marked IH, *i.e.* Jeffry Hunt. (Fig. 5.)

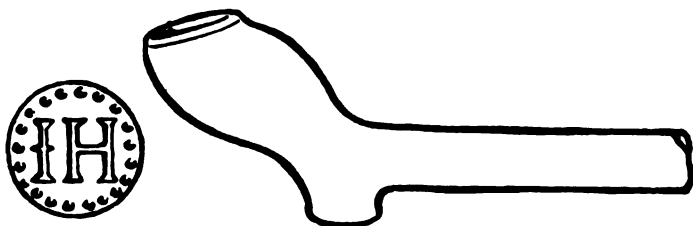


FIG. 5.

Nathaniel Howell, admitted to the freedom 1651.

His pipes are marked $\begin{matrix} \text{NATH} \\ \text{HOW} \\ \text{ELL} \end{matrix}$ (Fig. 6.)

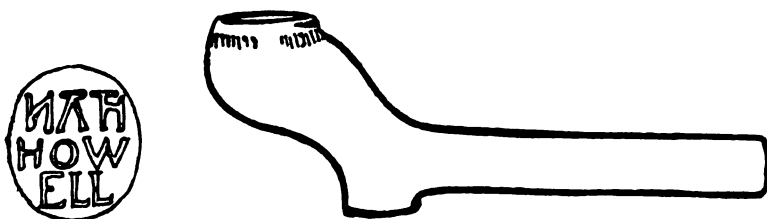


FIG. 6.

The next specimens are of a short barrel-shaped form, less elegant in outline.

Pipe marked HP upon the heel was made by Humphry Partridge, who was admitted to the freedom of Bristol in 1650. (Fig. 7.)

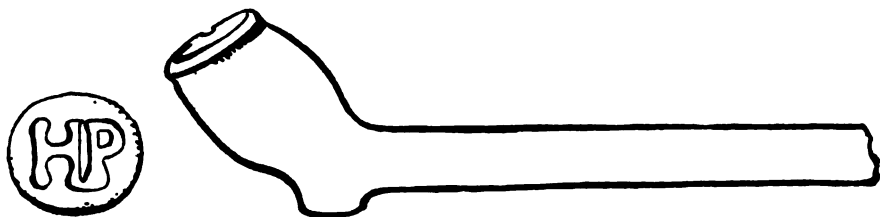


FIG. 7.

Pipes marked TS are ascribed to one Thomas Smyth, admitted a freeman in 1651; three specimens, the bowl of one more elongated than the others. (Figs. 8, 9, 10.)

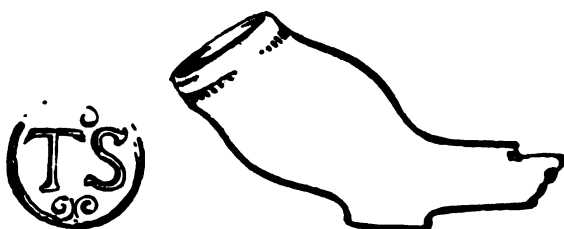


FIG. 8.

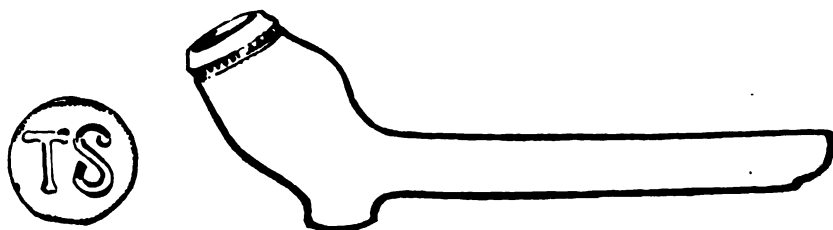


FIG. 9.

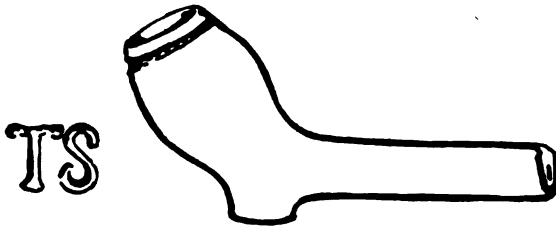


FIG. 10.

Other pipes of the same shape marked PE bear the initials of one Philip Edwards, who was admitted a freeman in 1649 (three specimens). (Fig. 11.)

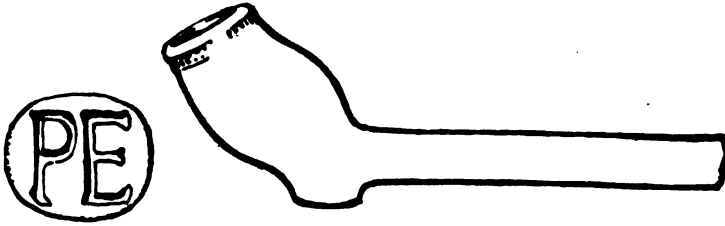


FIG. 11.

Pipe marked R·N is larger and of stouter make, more like the shape of the Hunts than any others. (Fig. 12.) It was probably made by Richard Nunny, who was admitted a freeman in 1655.

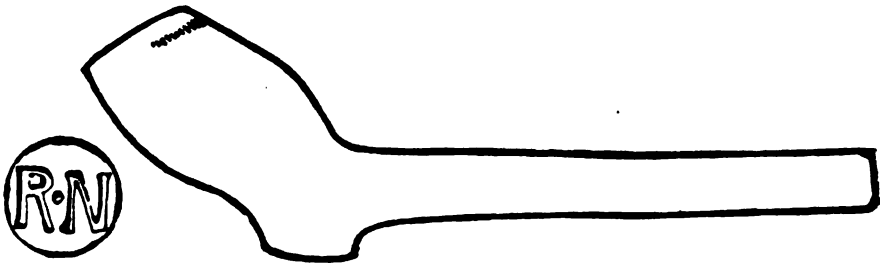


FIG. 12.

Pipe marked HS is similar in form to that by Thomas Smyth, but the maker is unidentified. (Fig. 13.)

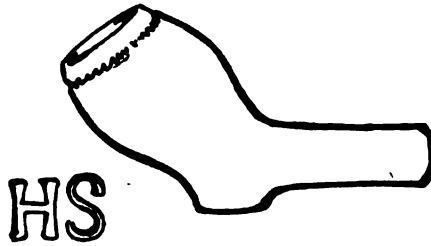


FIG. 13.

Pipe marked EC is of a short barrel shape, and the initials are unidentified. (Fig. 14.)

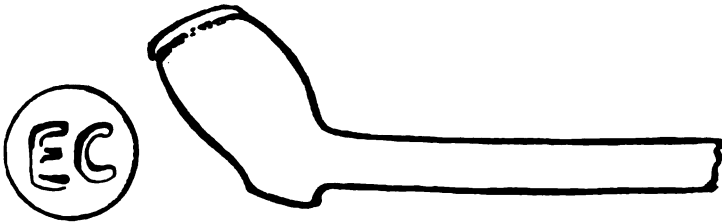


FIG. 14.

Pipe marked TM (?). The maker is as yet unknown (Fig. 15.)



FIG. 15.

Pipe marked with what looks like a maple-leaf in a small circle varies in form somewhat from any of the foregoing. (Fig. 16.)

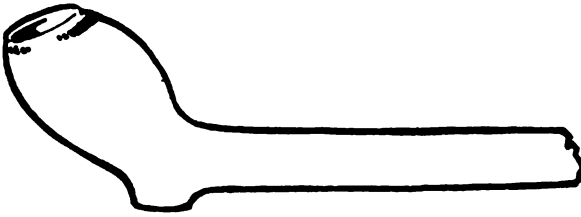


FIG. 16.

A pipe with a plain heel and longer stem and a narrow barrel-shape bowl (Fig. 17) Mr. Pritchard tells me he



FIG. 17.

can date *circa* 1662. It is, however, singularly similar to a specimen marked TS ascribed to Thomas Smyth. Most of these latter pipes are like those described in my first paper as belonging to the period between James I. and Charles II., which appears to agree satisfactorily with their actual dates.

In addition to the above, specimens bearing the following marks were met with in the course of the excavations:—

An anchor, W.C., I.H., E.L., A.N., C.B., R.B., EDWARDS, L., T.M., and I.P., also a specimen of the celebrated "Gauntlet" pipe.

I cannot conclude these notes without again thanking Mr. Pritchard for his gift of these pipes, which has enabled me to place this valuable information on record. And I hope that he will be able further to investigate the subject, and trust that others when they have the opportunity will examine the registers of their cities or towns for the like results.

CURRENT ARCHÆOLOGY.

THE CHURCH OF HAYLES ABBEY.¹

The Abbey of Hayles was founded in 1246 by Richard earl of Cornwall, for monks of the Cistercian Order, and was colonised from the royal foundation of Beaulieu, in the New Forest, by twenty monks and ten *conversi*. In 1251 the work of building had so far progressed as to enable thirteen altars to be dedicated. In 1270 Edmund earl of Cornwall presented the famous relic of the Holy Blood. New work was immediately commenced, and was completed, together with the shrine to contain the relic, in 1277.

Before the excavations were undertaken last year upon the site of the abbey church at Hayles, very little was known respecting it.

All that remains above ground is part of the south aisle wall of the nave next the cloister. Now, from entire ignorance respecting the nature of the church, complete knowledge of the whole ground plan has been the reward of those engaged in the excavations.

More of the walls above the footings might have been left, but it is fortunate that the comparatively small amount that does remain enables the whole plan to be reconstructed without drawing anywhere upon the imagination.

The church that was commenced at the foundation of the abbey in 1246 was, as usual, cruciform in plan, and consisted of presbytery with aisles and a procession aisle with five chapels eastward, transepts with three eastern chapels to each, and a nave with aisles. All the main arcades were built upon sleeper walls as at the mother abbey of Beaulieu.

It would be natural to suppose that a daughter house would follow the plan of the parent; but Hayles, so far at any rate as the church is concerned, is an excellent

¹ Communicated by Harold Brakspear, F.S.A.

example to show that this was not the general custom, which is also borne out by the fact that Netley, the other daughter of Beaulieu, was neither like the parent nor its sister of Hayles. All three foundations are very late in the list of Cistercian houses in this country, and the universal similarity of the early plan had long before become anything but general owing to various causes.

At Hayles the presbytery was four bays in length, with the westernmost bay considerably narrower than the rest.

On the south side the plinths remain of two of the main arcade piers. The eastern one retains the draft lines of the bases, and the western the draft lines of the pier itself. The piers consisted of clusters of four large columns towards the cardinal points with smaller ones between. Each had a wide fillet in the centre. The arches were of three orders with a label (Fig. 1, Plate II). The main span was vaulted, with transverse and diagonal ribs, with large carved bosses at the intersection of the latter. There were no ridge ribs.

Between the piers and separating the aisles from the presbytery were solid walls 3 feet in thickness. Unlike the thirteenth century work at Fountains, Tintern, and other Cistercian abbeys, these walls were not provided for from the first, but subsequently built in between the piers.

On the north side the wall was subsequently narrowed over 12 inches,¹ but for what reason it is impossible to say.

The east gable, judging from the two projections in the footings, was pierced by three arches, probably in line with the arcades on either side.

The side aisles were mere passages to the eastern altars, and were vaulted with cross and diagonal ribs without bosses. Against the outer walls were stone seats upon which the vaulting shafts rested. At the east end of the north aisle the first course remains of the projecting pier to carry the cross arch in line with the east gable. The outer walls are of the unusual thickness

¹ This at any rate was the case in the second bay, as is shown by an added double row of tiles of different

date from the original paving, and presumably the others were similarly altered.

of 5 feet, and the buttresses project another 6 feet, so that doubtless the main vault of the presbytery was supported over the aisles by flying buttresses. In line with the main east gable were large turrets, and the southern one, if not both, contained a vice or spiral staircase.

That there was an eastern termination containing chapels beyond the main gable is proved: 1, by the evidence of dedications of thirteen altars, which could not be accounted for without there being five in this position; 2, by the projecting base already noticed in the north aisle; and 3, by the footings of both aisle walls continuing across the later chapels to some 24 feet beyond the main east wall.

If this termination was merely a single aisle as at Byland and Waverley, it would be entirely occupied by the chapels and necessitate the procession path being within the main east gable, as it was in those two cases. But the high altar at Hayles occupied this position, so the procession path as well as the chapels would be eastward of the main east gable, as is the case at Dore, the eastern extension of which was being built at the same time.

Of the crossing nothing remains beyond the footings of the great piers, but there are indications that the tower caused trouble early in its history, as will be shown later.

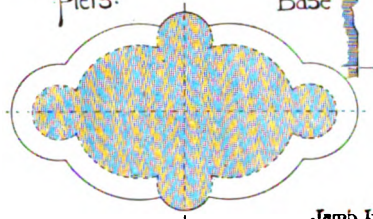
The transepts were both four bays in length, vaulted as the presbytery. The main east walls were carried on arcades with piers of the same plan as those of the presbytery, except that, judging from the lowest course of the one left in the south transept, they were without bases or plinths, except to the column on the west face, which had both (Fig. 2, Plate II). The chapels were divided from one another by walls 10 inches thick.

The south-east corner of the south transept has been completely destroyed together with its foundations.

The west wall is 8 feet thick and contained the night stairs to the dormer, which had a square vaulted lobby at the foot. The angle shaft with base and cap to carry the vault remains in the north-west corner of the lobby. This treatment of the night stairs is the same

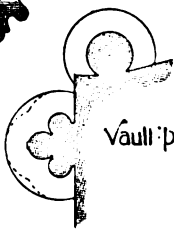
NAVES:

Apse
Piers.



Base

Vault rib of Chapels



Vault piers of Chapels



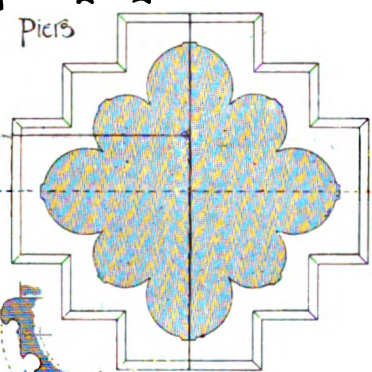
Vault ribs of Shrine.

Jamb Fragment



Presbytery

Piers

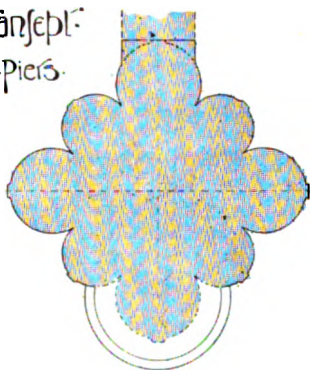


Aisle Vault ribs.



Transsept

Piers



Main Vault ribs

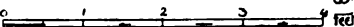


Arch



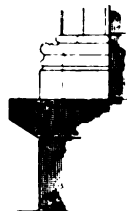
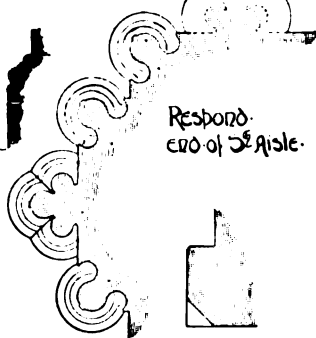
Arch & Pier
Strengthening first Bay

Scale of



NAVE

Respond end of Aisle.



Seat against Aisle wall.

W. door of Aisle.

Harold Brukspear, F.S.A., mens. et del.

References to text: FIG. 1. PRESBYTERY PIERS.

FIG. 2. TRANSEPT PIERS.

FIG. 3. RESPOND IN S. AISLE.

FIG. 4. APSE PIERS.

as that at Beaulieu, but so far as is at present known there are no other examples in this country.¹

The north transept would have, as usual, a doorway in the north gable, which apparently was subsequently used as the entrance for pilgrims to the shrine. Externally between the northernmost buttresses on the west side are the paving and remains of the walls of a small room 13 feet by 9, which was perhaps the checker of the sacrist or his assistant whose duty it was to conduct the visitors to and from the shrine.

Eastward of the chapels was another added chamber, but this has not yet been sufficiently excavated to show its character or how it was entered.

The nave was eight bays in length with north and south aisles, but so far as at present excavated, nothing beyond the south aisle wall remains above the footings. The easternmost bay was considerably wider than the others, but the arch into the aisles was of the same width as the rest.

The usual division walls between the nave and aisles of a Cistercian church certainly did not exist in this first bay, unless they were built, like those in the presbytery, independently of the main structure. For adjoining the place where the south-east respond should be is a semi-circular base that supported a curious three-quarter column with a couple of smaller shafts at the sides, shaped at the back to fit the mouldings of the older respond.² A number of long stones of this shape were found in this bay, but not elsewhere, showing that the easternmost pair of arches only were strengthened in this manner.

The arch was treated in the same way, but was further strengthened by the insertion of new bonding stones. This work must be little later than the main building, as the arch mould is exactly copied. A similar example of strengthening, but of later date, occurs in the same

¹ At the Austin canonesses' houses of Lacock and Burnham the stairs are similarly formed in a thickening of the dorter wall, but served the double purpose of day and night stairs, and are

entered from the cloister and not from the church.

² The object of these was first pointed out by my friend Mr. W. H. St. John Hope, to the Rev. Canon Bazeley, before I visited the excavations.

position at Christchurch, Canterbury, there inserted on account of some settlement of the tower.

The nave aisles apparently were precisely similar to those of the presbytery. The south aisle wall remains to a considerable height. At the east end are the bases of the respond for the cross arch (Fig. 3, Plate II). The east bay contains the procession doorway to the cloister. Internally this is mostly destroyed, but it had nook shafts in the jambs and a draw-bar hole in the east jamb. The first vaulting shaft has been inserted, but is merely an alteration in design, as the base mouldings are precisely similar to all the others, except the third and seventh, which have different mouldings, but are apparently of the same date.

The second vaulting shaft was destroyed by the erection of a stone screen across the aisle. From this westward was a stone seat, which in the third bay has been cut down to the floor level, and again at the sixth bay.

In the westernmost bay is an inserted doorway from the cloister, of the fifteenth century, and immediately to the west is the moulded jamb of a doorway leading to a skew passage to the *cellarium* and the dorter of the lay brothers above.

At the west end of the aisle is a plain doorway of one chamfered member.

The west portion of the nave has yet to be excavated.

To revert to the east end and the alterations that were effected there for the accommodation of the shrine. As before stated, the original termination beyond the main east gable consisted of a procession aisle with five chapels eastward. Before any of the new work was commenced it is reasonable to suppose that the basement of the shrine was erected within the pre-existing chapel and part of the eastern aisle. This basement still exists to about 3 feet in height, built of rough hewn stone, and was evidently covered up from first to last with wainscot and tabernacle work. It is placed over 12 inches out of centre towards the north, which would hardly have happened if it had been erected after the new work was finished and the older had been removed.

From the plan it will be seen that the whole of the

new work could easily have been constructed round and over the centre division of the original eastern termination without interfering with the procession path to the shrine round the east end.

The *novum opus*, which took six years to build, consisted, on plan, of a five-sided apse, terminating the main walls, the aisles being continued around it as a procession path, with five semi-octagonal chapels radiating therefrom; the whole bearing a marked resemblance to the work round the feretory of Edward the Confessor at Westminster built some twenty-five years before.

In addition to the footings, which remain complete, of the whole of this work, there exists a considerable amount of the first few courses of the walls of the two southern chapels, from which the whole plan can be reconstructed.

Each chapel contained an altar against the wall opposite the opening from the aisle, raised upon a single step,¹ and was vaulted with ribs springing from triple wall shafts in each angle, which met in the centre without a boss. Externally each angle had a large buttress. The footings of those to the centre chapel differ from the others in being wedge-shaped. Whether this indicates that the buttresses above followed these lines is impossible to say, as nothing remains above the footings.

The main apse was carried on clustered piers of a curious shape, which will be better understood from the detailed plan (Fig. 4, Plate II) than by description. The lowest course and part of the base of one of these piers remain towards the south-east.

The old east wall, with its three arches, was afterwards removed, as proved by the existence of stones similar to the inner member of the main arcade being used up in the pedestal of the lavatory in the south aisle, of which more hereafter.

To the west of the southernmost chapel is a small doorway opening outwards into what was apparently the passage to the infirmary.

With respect to the internal arrangements, the

¹ I beg to thank Mr. W. H. St. John Hope for pointing out the evidence of this step, which is clearly shown

by a mortar line against the remaining portions of the walls.

excavations have been very successful, for whereas at Beaulieu and Waverley¹ not a sign has yet been found of any cross screens or quire stalls, here they have all revealed themselves with unusual clearness.

The high altar, as before stated, was immediately beneath the main east gable, but nothing remains of it except a rude mass of rubble foundations, which formed part of the platform. In the second bay on the south side the wall between the piers is thicker than in the others in order to accommodate the *sedilia* and *piscina*. In the westernmost bay on the north side is an interment once covered by a richly decorated monument.

The north aisle retains a considerable amount of its original tile paving; it had a wide band of tiles down the centre, evidently to guide the procession.

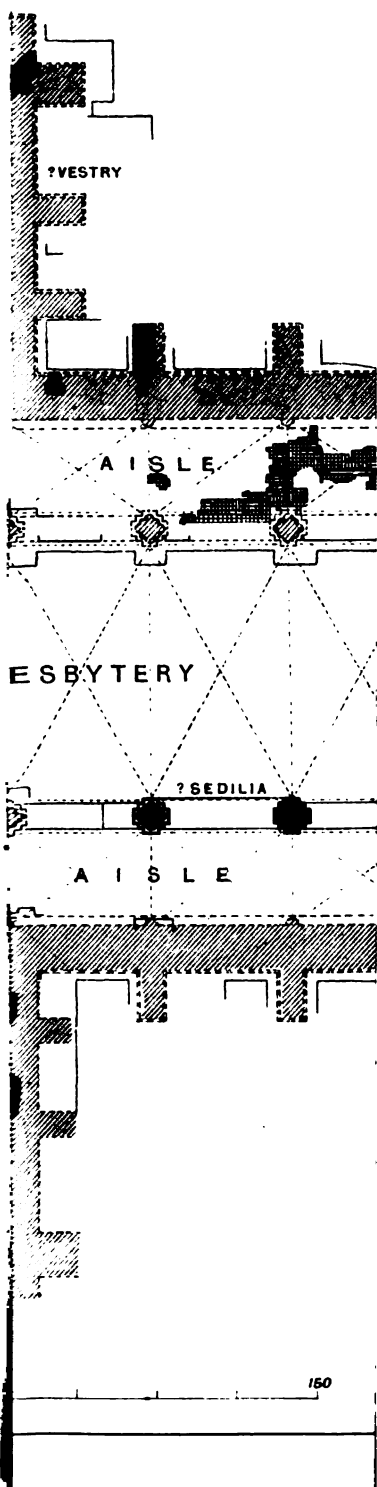
The south aisle had in its westernmost bay on the north side a lavatory with a small drain leading therefrom for a short distance. An exactly similar arrangement existed at Beaulieu, and its use was probably to receive any holy water that remained over after the Sunday procession. At Fountains it exists in the form of a *piscina* in the seat beneath the wall arcade, and at Furness just within the vestry. In all cases it seems an afterthought, and at Hayles the pedestal is formed of stones similar to the inner member of the main arcades.

The transepts show little evidence of any arrangements except that the chapels were raised a step above the main floor and were enclosed by screens, probably of stone, between the arches.

The quire occupied part of the crossing and the first bay of the nave. The quire screen was of stone and placed slightly westward of the first pair of nave piers. Allowing the normal space for each seat, there appear to have been fifteen stalls to the north and south and three on either side the quire door facing east, making thirty-six in all. In front of the north and south ranges of stalls is a sunk trench $2\frac{1}{4}$ feet wide, which

¹ Since this was written a portion of the footings of the *pulpitum* has been found, and it is hoped that by further

research other evidences of the arrangements may be traced.



was apparently the space beneath another range of seats for the novices.¹

Besides the door through the screen at the west end of the quire, which was known as the lower entrance, there were other entrances on either side eastward of the stalls and immediately westward of the east crossing piers, known as the upper entrances. Between the eastern piers of the crossing were the *gradus presbyterii*.

Six feet westward of the quire screen in the nave was another transverse screen, and these two screens supported the *pulpitum*. The usual flanking altars on either side the quire door do not seem to have existed at Hayles, or if they did at first they were subsequently removed upon the erection of the nave altar.

Between the third pair of piers was another cross screen, upon which would stand the great rood, with the nave altar in front, flanked by two doorways through the screen.

Between this rood-screen and the *pulpitum* was the retro-quire, where the occupants of the infirmary attended to hear divine service.

The four westernmost bays of the nave were originally occupied by the quire of the lay brothers, as Mr. St. John Hope so clearly proves in his monograph on Fountains. It seems clear that at Hayles, as in other Cistercian houses in this country, the lay brothers' quire was subsequently disused and removed together with the solid walls under the main arcades at the back of the stalls.

In the north aisle opposite the second pier was a cross screen that apparently had an altar to the west, and in the south aisle was a corresponding screen, near which no remains of an altar are now to be found. At the next pier on this side was another cross screen with an altar, and in the third and fourth bays between the main piers are two interments formerly surmounted by very ornate canopied monuments.

¹ This was paved with large lozenge-shaped tiles some 12 inches beneath the floor level.

ST. MARY'S CHURCH, CARDINGTON.

An account of the "restoration" of this church recently appeared in the *Builder* (August 10th, 1901, p. 140). It seems to have been sufficiently drastic, comprising the demolition of the nave and tower, with the reconstruction of the chancel windows, "in precisely the same position as before." A new tower has been built at the west end of the new nave, opening into it by "the large Norman arch, which divided the old tower from the nave. It has been most carefully reconstructed stone by stone, the only change effected in it being the recessing of the edges, converting the arch into one of a double order." It is further to be noted that "a number of large and vigorously designed ancient gargoyles have been introduced into the external cornice of the chancel."

Such doings as these deserve to be recorded, if only to show that the spirit of the early "restorer" is yet with us; but it is disappointing to find these atrocities printed without a word of comment in the pages of one of the leading professional papers.

Proceedings at Ordinary Meetings of the Royal Archaeological Institute.

July 3rd, 1901.

EMANUEL GREEN, F.S.A., Vice-President, in the Chair.

Mr. F. G. HILTON PRICE, Dir.S.A., communicated a paper on "Clay Tobacco Pipes of the Seventeenth Century found recently at Bristol." A number of specimens were exhibited in illustration of the paper, which is printed at p. 342 of the *Journal*.

Mr. J. McANDREW read a paper on "The Early Churches of Asturias," illustrated by lantern-slides made from photographs taken by Mr. J. C. Stenning.

These buildings represent the period between the expulsion of the Moors from Asturias, about 760 A.D., and the introduction into Spain of the Romanesque style in the twelfth or late eleventh century. They owe their origin, in common with all early European architecture, to Roman tradition, and have the usual characteristics of lofty and thin walls, rectangular naves with lateral and western adjuncts, and windows filled with pierced stone slabs of elaborate design. Several of them can be dated with some accuracy from historical records, which adds considerably to their value as examples of early work.

Setting aside the somewhat doubtful example of the Camara Santa in Oviedo Cathedral, the earliest dated building is the church of Santullano, or St. Julian, near Oviedo, founded by King Troila about 760. It is cruciform in plan, with lofty and thin walls, and windows with characteristic pierced tracery slabs. The transepts are undeveloped, and to be considered rather as lateral chapels than true transepts, and are divided into two stories. The east end of the church, as in all other early examples, is square, and the number of pilaster buttresses in this and the other buildings of its class is a notable feature. San Salvador de Val de Dios, consecrated in 893, about eighteen miles north-east of Oviedo, has a similar plan, with the additional feature of a vaulted cloister on the south of the nave, showing in its west window a very fine specimen of a pierced slab. San Salvador de Priesca is another church of this type, with western vestibule flanked by what were possibly living-rooms. It was consecrated in 915.

San Miguel de Lino (c. 850) is a very fine specimen of the early style, being cruciform in plan, but having its transepts shut off and divided into two stories, of which the upper opens on to the church by a balustrade. The jambs of the western doorway are ornamented with panels of figure-subjects in an enriched border which is very reminiscent of Roman detail. The western vestibule here has on either side a chamber with staircase leading to a western gallery and two rooms, now closed, above it. Santa Christina de Lena, of the ninth century, is cruciform in plan with small transepts, opening, as usual, only by a doorway to the nave. The raised east end is

approached through an arcade of three arches at the head of a flight of steps. The walls of the church are only 1 foot 9 inches thick. Another building, now called a church, Santa Maria de Naranco, close to the last named, and within a few miles of Oviedo, is of a type quite distinct from all the other early buildings, being in plan a parallelogram open at both ends, and entered from a porch in the middle of one side. There are grounds for believing it to be not a church, but a royal palace of 850 or thereabouts. It is roofed with a tunnel vault with ribs springing from shafted responds.

Professor BUNNELL LEWIS read a paper on "The Antiquities of Toulouse," and exhibited coins, engravings, and a series of photographs, the last being kindly lent by Monsieur Léon Joulin.

Notices of Archaeological Publications.

RAMBLES AND STUDIES IN BOSNIA, HERZEGOVINA, AND DALMATIA, WITH AN ACCOUNT OF THE PROCEEDINGS OF THE CONGRESS OF ARCHÆOLOGISTS AND ANTHROPOLOGISTS HELD AT SARAJEVO, AUGUST, 1894. By ROBERT MUNRO, M.A., M.D., F.R.S.E. Second edition. 1900. 8vo. Edinburgh: Blackwood. pp. xxv, 452.

That a book of this kind has reached the stage of a second edition furnishes the best evidence that it has met a want. The style, however, is easy and pleasant, and Dr. Munro has successfully combined a good deal of archæology with the recital of facts that are usually associated with Murray or Baedeker. He modestly disclaims for a part of the antiquarian matter any merit for himself but that of having put the facts into an English dress. The original accounts appear in other languages from the pens of the officers of the National Museum at Sarajevo and Spalato, and Dr. Munro has been indebted to them and to the governments for much help in this direction, as well as for clichés of the illustrations used in the original memoirs. These advantages have added considerably to the value of the book, and the illustrations in particular are both numerous and for the most part excellent. It is no bad test of the quality of a work of this character if the reader feels that he would have enjoyed taking part in the many functions described, no matter whether they are polyglot meals or equally polyglot antiquarian diggings. And this is just the effect produced by the book. The author's energy and personal interest in all the work and scenes that he describes are so intense that he carries his interested reader with him throughout.

There are full accounts of the different stations visited by the Sarajevo Congress of archæologists, and even of the discussions that followed an examination of the sites. Many of the latter show by the wide divergence of opinion among the learned men present how far we are from a true understanding of the early archæology of Europe. The neolithic station at Butmir, for example, which Dr. Munro himself holds to be a typical pile structure, was held by Dr. Montelius to be of the Stone age and to date before 2,000 B.C., by Mr. Szombathy to belong approximately to the Mycenaean period. M. Salomon Reinach held the art to be entirely indigenous, while Dr. Hoernes and Professor Virchow saw Phœnician influence and even colonists there. The most remarkable features were undoubtedly the clay idols and the spiral ornament on the pottery, and these, with the absence of any metal whatever, are certainly puzzling. It would seem almost safe to prophesy that bronze will be found eventually, if, as seems probable, the settlement belongs to the final stage of the Stone period. It is well to bear in mind how rare the metal is in such cases, *e.g.* in our own British barrows, where a hundred articles of bone or stone are found to one of bronze.

The real central point of Dr. Munro's book is, however, not so much the Stone and Bronze ages, interesting though they are, but the Early Iron period, which for us in this country has so important a bearing upon our own Late Celtic art. Of this class he gives detailed accounts of the stations at Glasinac and Jezerine, with numerous figures of

the typical objects found, which add greatly to the interest of his descriptions. Then on the homeward journey he visits and describes a variety of places, more or less well known, Spalato, Salona, and the palace of Diocletian, and finally gives an interesting sketch of the prehistoric and historic conditions of Bosnia and Herzegovina.

This is all good and written in a bright and lucid style, but in the final chapter, which deals with the periods of Hallstatt and La Tène, good as it is in many respects, there is much left to desire. The ordinary reader, unfamiliar with the subject, would certainly take it for granted that no Englishman had had a hand in the determination of this particular class of antiquities in our own islands. For Dr. Munro it would appear that the long (antiquarian) feud between Lindenschmit of Mayence and A. W. Franks over the origin of our Late Celtic remains had never existed, and that the all too brief chapters in *Horæ Ferales* had never been written. Of course Dr. Munro knows all these things: he knows that Lindenschmit maintained to his dying day that the bronze shields found in the Thames were made by Etruscans, and that Franks held them to be of indigenous origin and gave the special art the title of Late Celtic. But why quote the authorities of every country but our own? And to go a little further, why not quote our own collections? One smiles at the disregard of British antiquities by a foreign writer, but ignorance forms a kind of excuse. Dr. Munro cannot plead ignorance, and knowledge has its responsibilities. It is not wise or fair to set up the claims of a host of continental critics, including some of small note, while one of the foremost antiquaries of our time is passed *sub silentio*.

THE ARCHITECTURAL HISTORY OF THE CATHEDRAL CHURCH AND MONASTERY OF ST. ANDREW AT ROCHESTER. By W. H. ST. JOHN HOPE, M.A. London: Mitchell & Hughes. 1900. 8vo., pp. vi, 233.

The name of Mr. Hope on the title-page of a book on the architectural history of a building is assurance that the work within will be sound and thoroughly done, and to a large extent new. He writes for antiquaries and not for the superficial reader, whose digestion is not strong enough for a book like this. Indeed, even an antiquary may gently hint a wish that the good meat had been served up in a more attractive form. For instance, it would have been more easy to assimilate if it had been divided into sections (or shall we say courses?) than all put before us in one *mass* as it is now. And there are parts of the text which are too highly seasoned with feet and inches, most of which would have been better left on the plans and other illustrations, from which the consumer might help himself to his liking.

But our grumble is over. The book is a capital book, and will be the quarry for the Rochester guide-book maker for many a year to come. He may make good or ill use of it, according to his understanding of it. But he will not be able to do without it.

The see of Rochester is one of the oldest in England. In three years it will enter into the fourteenth century of its existence. But until quite modern times, when all the South of London has come under its sway, it has always been one of the least important and most poorly endowed. We do not know what was the constitution

of the church when it was first founded. But, being the work of missionary monks, it was most likely monastic. If it were, it became secular, as many others did, and we find it so in the eleventh century. It was then miserably poor, and Lanfranc, Archbishop of Canterbury, gave it a fresh start by refounding it as a Benedictine abbey. Lanfranc put in Gundulf as bishop, and he held the see for thirty years and with the Archbishop's help built the monastic offices and a large part of the church. The church seems to have been completed in the twelfth century, and in the thirteenth it was considerably altered and enlarged. This is the usual story with such churches, and many a one of them was rebuilt part by part until it was wholly transformed into the fashion of the later middle ages. At Rochester, however, we do not find the steady and sustained working towards a definite and understood end which has given us such churches as Wells and Lichfield. Work was done from time to time, and much of it, looked at in detail, is good; but it is not coherent, and the architectural history of the place is the record of a succession of false starts.

It has been Mr. Hope's task to follow these up and distinguish between them. And his long study of building has enabled him to make plain much which before was a confusing tangle.

In the sixteenth century the monks were again replaced by seculars, but the monastic buildings were kept in the King's hands and converted into a royal manor house. The life of that house was but short; it was pulled down for its materials, and so much of the older work incorporated in it perished with it that the close of Rochester is poorer in architectural remains beyond the church than that of any other of the new foundation cathedrals. This is the more to be regretted because, owing to the shape of the ground, the arrangements of Rochester were peculiar, and the few remaining fragments show that some of the buildings must have been of high architectural quality.

It seems that, but for the troubles of the civil wars, through which it passed with less harm than some, the church had rest during the seventeenth and eighteenth centuries. But the nineteenth was a bad time for it. The "restoration" agony began early there and appears not yet to be over. Cottingham set it going by destroying the old central tower and putting up one of his own which is absolutely and irredeemably bad, and the other work he did is no better. Sir Gilbert Scott came later and did after the fashion of his time. He would not destroy where he knew it, but he did not always know. And his respect for old work did not prevent him from smartening it up to the vulgar shine which is delightful in the eyes of too many cathedral authorities. Later works show no improvement on Scott's, and Mr. Hope calls attention to some of the more lamentable exhibitions of bad taste, such as the covering of the backs of the Norman arches at the west end with inscriptions in mosaic. That truly is an atrocity not easy to match.

In these days, when so many writers will undertake to give us the story of an old church with only a diagram plan, or even without a plan at all, it is a treat to find such plans as Mr. Hope gives us. They are models of what such things should be. The other illustrations are generally good.

SUPERSTITIONS OF THE HIGHLANDS AND ISLANDS OF SCOTLAND, COLLECTED ENTIRELY FROM ORAL SOURCES. By JOHN GREGORSON CAMPBELL, Minister of Tiree. Glasgow: MacLehose & Sons. 1900. 8vo., pp. xx, 318.

The lamented author of this work, during thirty years' service as minister of Tiree, made it his business to acquire at first hand a knowledge of the superstitions entertained by his flock. He purposely avoided taking books as his authority, and indeed frequently found in them statements at variance with the popular beliefs as actually entertained, generally due to a want of knowledge of the language, feelings, and modes of thought of the people. He even declined to accept written correspondence as an authority for any statement, preferring to obtain oral information from the Highlanders themselves in the spirit of their own proverb, "If it be a lie as told by me, it was a lie as told to me." The result is a very valuable and authoritative volume, dealing with fairies, tales illustrative of fairy superstition, tutelary beings, the urisk, a kind of solitary brownie, the blue men, the mermaid, the water horse, superstitions about animals, miscellaneous superstitions, augury, premonitions and divination, dreams and prophecies, imprecations, spells, and the black art, and finally with superstitions relating to the devil. Altogether nearly 300 distinct legends were recorded by Mr. Campbell.

It would be wholly beyond the space available to us to give any sort of critical analysis of all this wealth of information and of its relation to similar superstitions in rural England and elsewhere. We must be content with picking a few plums as specimens of the whole. The Gaelic men and women of peace, like the English elf, are, when referred to in the singular, strong men and beautiful women who hire themselves to the human race for service, and contract marriages with it, from which no good can come; when referred to in the plural, are a diminutive race, travelling in eddy winds, lifting men from the ground, stealing, and entering houses in companies. Fairy hags used to be seen at certain places in Tiree, but have long since disappeared, the islanders having become too busy to attend to them. By a curious coincidence, two famous Highland archers, in regard to whom exploits almost as wonderful as those accredited to our own Little John are recorded, are named respectively Little John the Black and Little John of the White Bag; but Mr. Campbell thinks these were men really of small stature and not so called, as our Little John was, in ironical allusion to his great size. It is unlucky to use for washing your hands or face water in which eggs have been boiled or washed. It is a common saying when mischance befalls a person through his own stupidity, "I believe egg water was put on me." The story of the devil joining a party of young people playing cards and taking a hand, vanishing up the chimney in smoke on his horse-hoof being detected, is universal over the Highlands. The only trade the devil never was able to learn was that of tailoring. When he went to try, all the tailors left the room, and, having no one to instruct him, he omitted to put a knot on the thread, so that the thread always came away, and he gave up the trade in despair. He wanted to learn it to make his own clothes, as no one would make clothes for him.

A List of the principal Works published under the superintendence and sanction of the Council of the Royal Archæological Institute.

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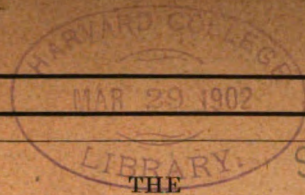
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A desire has been expressed, by persons who have recently joined the Institute, to obtain the earlier volumes of the *ARCHAEOLOGICAL JOURNAL*, in order to become possessed of the complete series. The first five volumes, published by Messrs. Parker, London and Oxford, 1844-1848, may be procured through any bookseller. MEMBERS have special facilities in regard to the purchase of the subsequent volumes, VI. to LVIII. inclusive; also in regard to the Transactions at the Annual Meetings, and other publications of the Institute.

(See list of Publications, page 3 of this wrapper.)

The general Index to the first twenty-five volumes of the *Journal*, brought into shape by the late Mr. Burtt, and completed by Sir John Maclean, may be obtained from the Secretary, price 10s. 6d.

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NOTTINGHAM CASTLE.

By EMANUEL GREEN, F.S.A.

Standing on the castle rock on the highest point and looking northward as far as the eye can carry, on the left there is Peakland and on the extreme right the mouth of the Humber and the sea. An imaginary line drawn between these two points will fairly mark the boundary of the northern part of the early kingdom of Mercia, of which Nottingham from its situation was the chief centre. The Humber, convenient harbour for the natives, also by such convenience invited, as it were, a visit from neighbours over sea, as it does to-day. Thus it happened that from the coming of the Danes, those adventurous vikings, this whole district has now a very special historical interest. In 868 Danish forces came down from northward and attacked and took Nottingham, where they strengthened the fort and made the place their winter quarters. To account for so easy a victory, the new-comers, it must be remembered, were old warriors, sea rovers maybe, in good strength, well armed and equipped, desperate in their enterprise. They had already harassed the coast of France quite to the south and had often penetrated far inland. Their attack on England, however, resulted in conquest and settlement rather than loot. The Mercian king, with a sparse population quite unable to cope with his new neighbours, sent urgent requests for help to the western king Ethelred. Acceding readily, Ethelred, with his brother Alfred, then about twenty years of age, marched for Nottingham with a strong force eager for a fight, but on arriving he found the Danes had so strengthened their defences, and were so strong within their fort, that no entry could be gained. As they refused to come out to fight nothing could be done, so both sides "had recourse to fair words," a truce was accepted, a peace was concluded, and

the brothers who came to conquer returned with their troops defeated.¹

By other attacks in the south, by the Thames, the Danes still further succeeded. They marched across and practically gained all England, except the west, which was now under Alfred. After trouble, doubt, and difficulty, after the events of Ethandun and Athelney, Alfred met Guthrum the Dane at Wedmore, and there, by the peace terms agreed upon, the Danes quitted all territory save the northern part of Mercia. Nottingham being within the retained boundary thus ceased to be English, and became absolutely and entirely Danish, the district being known as Danelegh or Danelaw. After this peace reigned, and the new-comers seem to have been of good metal, if we may judge by the settlements and the many homesteads with their place names bearing the familiar "thorpe," "holme," or "by."

But Alfred and Guthrum being dead, their treaty had to be revised. In 922 Edward the elder, stronger in power, and determined to settle the question of suzerainty, marched into Mercia, where he met with no opposition, as all the people submitted to him. He took possession of Nottingham, ordered it to be repaired, and—be it noted—ordered it to be occupied both by English and by Danes.² This little episode shows that the fusion or friendliness was already strong, that both parties—if there were two—were agreed on the wisdom of joining the predominant partner, and gives us just a little glance at the early making of England. It may account, too, for the very distinct local physiognomy of to-day.

In 924, being again with a force at Nottingham, Edward ordered the building of a new burgh or fort on the south side of the river,³ opposite an old burgh or mound, with a bridge to connect the two.⁴ This gave the usual chance of exacting toll from passing boats.

Matters rested thus for nearly a century and a half. Nottingham fort remained probably without change, until the coming of a new master in 1068. In that year William of Normandy found it necessary to march

¹ Florence of Worcester, Roger of Wendover, Ingulf, Gaimar, Asser, Henry of Huntingdon.

² Anglo-Saxon Chronicle.

³ Mathew of Westminster.

⁴ Anglo-Saxon Chronicle.

northward and so came to Nottingham, where he strengthened the "*castellum*" and then marched for York. "*Rex cum exercitu suo Nottingham venit, ubi castello firmato,*" etc.¹ Another account gives this event in rather stronger words and tells that at Nottingham the King built a castle and gave its custody to William Peverell. "*Rex Nottingham castrum construxit et Guillelmo Peverello commendavit.*"²

Not perhaps understanding the position in England, the Danes determined to try again. In 1069 a fleet of two hundred and forty, one account says three hundred, Danish ships arrived in the Humber, bringing a strong force.³ These ships to us would be but open boats, perhaps from 70 to 75 feet long by say 15 feet broad, and drawing from 3 to 4 feet of water, and each ship could carry a hundred or a hundred and twenty men. Daring adventurers indeed! William was obliged at once to march northward to York. Quitting York on his return, he came again to Nottingham and then passed on to Pomfret.⁴

In early translations, as perhaps elsewhere, the Latin word "*castellum*," in haste or without care, is very easily made "castle" in English. But the word "castle," conveying as it does to us a special meaning, is not applicable to these early times. "*Castellum*," being a diminutive, means rather a fort, a fortified place. It must be understood, then, that the early defensive works often spoken of as castles were forts, moated and stockaded mounds, or strong earthworks strengthened by stakes and palisades, but without masonry. There is no defensive masonry in England dating before the Norman buildings.

The word "*castrum*," on the contrary, marks a larger intention, a stronghold such as is now known as a castle. From the two quotations given above, one in which "*castellum*" is used refers to the English pre-Norman fort, whilst the other in which "*castrum*" is used comes just at the time of change, and marks a determination which clearly required time, but which was afterwards actually

¹ Florence of Worcester.

² Ord. Vitalis, *Historia*, etc., Lib. IV, p. 314b, ed. 1855.

³ Florence of Worcester.

⁴ Vitalis, Lib. IV, p. 319bc.

carried out. William himself continued the use of the old plan. At York he built two "castles"; one occupied a few months only in building, the other was finished in eight days. As soon as he was gone both were attacked and burned. Wood may be found used for this purpose long afterwards, as in 1323, when Edward II. from Nottingham ordered wooden peels to be erected about the walls of the castle and city of Carlisle, such being necessary until defects could be repaired with stone and lime.¹

To fix the time exactly when the change took place at Nottingham is next the trouble.

Keeping this in view, the Domesday survey of 1086 comes first to hand, and herein there is no mention of a castle at Nottingham. The record only tells that the waters of Trent, and the fosse, and the road to York, are preserved, so that if anyone hinder the passage of boats or dig up the ground or make a ditch within two perches of the King's road he must pay a fine of £8.

Thus it is presumed there was as yet no castle but that the old fort remained.

The first notice to be found of a probable building of stone and lime is in our earliest record, the Pipe Roll of 31 Henry I., 1131, which tells of the payment or expenditure by the sheriff of two shillings on the chapel of Nottingham—presumably the King's chapel in the castle, and thus showing it as some time in use. Although Henry I. cannot be traced to have actually been at Nottingham, he granted the town its first charter, and was from time to time not far away, but soon after his death in 1135, the castle comes frequently into notice, and in 1139 Stephen ratified a treaty there.²

At the commencement of the great troubles of Stephen's time the town seems to have remained in peace, until, being attacked and found without power of defence, it was plundered and burned in 1140.³ In 1141 the empress compelled William Peverell to surrender, and

¹ Close Roll, 17 Ed. II., m. 29.

³ Florence of Worcester.

² *Priory of Hexham*, ed. J. Raine, I, 106, 123.

William Paine was put in his place.¹ This was again changed, and in 1153 the town and castle were held by Stephen. Henry, known as the Duke of Normandy, came to attack, but Stephen burned the town, and the duke drew off,² "*oppugnandae munitionis quae natura loci inexpugnabilis videbatur, operam inanem omittens.*"³ In another attempt, however, he took the castle, although from its situation it seemed impregnable. In 1154 Stephen died, and the duke succeeded as Henry II.

So far these references have not produced an exact date for the building, just as would be the case with other castles of the time and class. The difficulty is increased here by the entire disappearance of the early works, there being thus nothing to be seen to guide the skilled eye and judgment. As Henry I., who began his reign in 1100, is the first name associated with it, about that date, or say 1120, may well be assumed as the time when it became habitable. How the money was raised for the cost there is no record. Judging by the later events to be noticed the sheriff found it, taking what was necessary from the county taxes. Towards these the town of Nottingham paid yearly £26 13s. 4d. The Gild of the Telarii or Weavers paid 40s. and the Monetarii or Moneyers 43 marcs of silver.⁴ Then also there was the Honour of Peverell. William granted large possessions to William Peverell, these being known afterwards as an Honour. As such all dues were paid directly and only to the King or his sheriff. The Red Book of the Exchequer, compiled about 1200 or 1204, shows a list counting the quarter-fees and half-fees of about sixty-four knights under the Honour; another gives perhaps a better list showing sixty fees and gives also the personal and place names from which they were due, all fully set out⁵; but there seems no indication that with the grant of the Honour and these knights' fees there was any reserve or enforced feudal payment for the special purposes of the castle.

Henry II., reigning without opposition, soon favoured Nottingham. He afforested Sherwood and must have

¹ *Priory of Hexham*, I, 186.

² *Henry of Huntingdon*, 294.

³ *Wm. of Newburgh*, ed. Howlett, 89.

⁴ *Pipe Rolls*, 2 Hen. II., Roll 8, m. 1;

⁵ *Hen. II.*, Roll 6, m. 1.

⁶ *Liber Ruber*, I, 180, 181; II, 583.

been often in the castle. In 1155 he dated a charter there.¹ In 1157 Malcolm, King of Scots, was there.² In 1165 Henry was there again, and there is recorded the carriage of wine from London, and also a sturgeon at a cost of 12s. 6d.³ In the same year the burgh of Nottingham paid its dues, £26 13s. 4d. In 1167 there is a charge for bacon or hogs delivered.⁴

So far these notices have referred to the Norman castle—the *castrum*—which William ordered to be built, and a stay may be made here for a glance at the plan and the elevation of this building (Plates I and II). The ground plan was made by Simpson in 1617, when all was perfect. The drawing or elevation shows a strong wall or curtain following the edge or shape of the high rock, the angles being protected and strengthened by square towers flush or even with the wall, without projections. The keep, too, on the highest point is also built flush with the wall, not, as might be expected, standing alone a few feet within. "The donjon or keep standeth by south and west and is exceding strong."⁵ Around within are the houses or lodgings as usual. The main entrance is seen next the tower. Although perhaps not large, it must have been very secure and strong. In the wall on the front, as shown on the drawing, are seen some steps from a postern door communicating by a passage within through the rock. There are other excavations, cellars, or stores beneath clearly for the use of the castle. Leland, coming about 1540, says, "There be great caves where many stones have been digged out and these caves be partly for cellars and store houses."⁶ But it happens that Nottingham is associated with other caves, others, too, of great interest. Our earliest chronicles tell that in the language of the Britons, Nottingham was called Tinguobauc,⁷ or, as another chronicle says, Tigguocobauc,⁸ meaning the house or dwelling of caves. Later the name became Snottingham with the same meaning—the

¹ Ancient Charters.

² Pipe Roll, 3 Hen. II.

³ Pipe Roll, roll 2, m. 2.

⁴ Roll 9, m. 2 dors.

⁵ Leland, fol. 112.

⁶ Leland, Vol. 1, fol. 111.

⁷ Roger of Wendover.

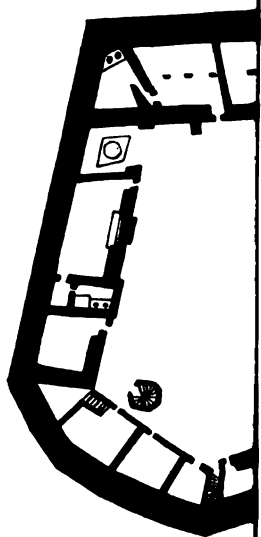
⁸ Asser.

PLATE I.



Notting

TAL



cave meadow dwelling, the place of cave dwellers.' The cave dwellings here referred to were on the hill slope and are now and long since covered and lost under the town buildings. They had nothing to do with the castle and must in no way be associated with it or any cave work near it. It was a fashion or craze in the sixteenth century in laying out a garden to have in it at least a grotto and if possible a cave or caves. Garden cave work may be therefore with fair probability of that time.

This Norman castle, strong enough as a military post, as with all others of its class, must have been hardly fit for a long residence even in those times, especially with the frequent visits and the growing interest in Sherwood. Henry, apparently fond of building, and especially castle building, soon started a new castle at Nottingham, adjoining the old one, as seen on the plan, and eventually forming and known as the lower ward. The records now show and give particulars of the new activity. In 1171 four entries appear for works done at the castle, totalling this year £364 10s. 11d.,² a large sum in those days. In 1172, again, the sheriff enters payment for "works" at the castle, £229 3s. 10d.³ In 1173 works at the castle and the houses in the castle and the gaol cost £140. Forty hogs this year cost £4 15s. 6d., salt £2 10s. 7d., cheese £2 1s. 6d.⁴ In 1174 building and works on the castle cost £17 18s. 8d. There is also a charge for knights and servants resident, £24 13s. 7d. Twenty quarters of flour cost £3 10s. 3d., and twelve quarters and a half of malt (*brasio*) cost 12s. 3d.⁵ In 1175 the works on the King's bedchamber cost £46.⁶ In 1176 the King was there, and in 1180 he kept Christmas there.⁷ In 1181 the expenditure on the hall of the King was £36 1s. 10d., and on the gaol £10 10s. 11d.⁸ In 1182 works at the hall cost £69 4s. 6d.,⁹ and besides this the sum of £61 11s. 4d. was taken from the Honour of Peverell. The total expenditure this year was

¹ Camden.

² Pipe Roll, 17 Hen. II.; Roll 4, m. 1-2.

Pipe, 18 Hen. II., Roll 2, m. 1.

⁴ Pipe Roll 11, 19 Hen. II., m. 1 dors.

⁵ Pipe Roll 5, 20 Hen. II., m. 1-2.

⁶ Pipe Roll, m. 1.

⁷ Hoveden.

⁸ Pipe, 27 Hen. II., m. 1, dors.

⁹ Pipe, 28 Hen. II., m. 2.

£216 12s. 8d.¹ In 1183 work at the hall cost £13 14s. In 1184 the houses cost £20 5s. From the Honour of Peverell for work at the King's houses and enclosing the King's wardrobe £47 12s. 8d.² In 1185 works in the King's chamber and raising the walls of the castle, and enclosing the bailey, which must have included the gates and bridges, cost £140, and the houses cost £35 4s. The sheriff records his expenditure on this work this year as £327 17s. 1d. In 1186 for works at the castle, in the clerk's chamber and the houses £47 16s. 2d., the total paid by the sheriff being £105 19s. 6d.³ A strange entry occurs this year, a charge for carrying to Stutebury the money of the Archbishop of York and Aaron which the King gave to John his son to go to Ireland from Nottingham.⁴ The association of the Archbishop and the Jew as money-lenders is very curious; also the entry introduces Prince John, soon to be another actor in this castle's history. The works charges now dwindle, and attention perhaps was drawn off to other events. In 1187 there is a charge for works in the castle and again for raising the walls of the same. In 1188 the charge is for repairs to the town gaol.⁵ By this time, then, the new buildings must have been fully planned and fairly finished, and here a glance may be given to the plate and ground plan showing the additions. The new ward had its own ditch and its own curtain or enclosing wall, which is seen well strengthened by round towers. The entrance was through a strong square tower or gate-house just at the weakest point of the older building. At one side or end of the drawing is seen the great new tower, the hall and chamber of the King, and the houses around it. Outside all, again, there is another wall with bastions enclosing the outer bailey and having its own gate and draw-bridge. All round on every side the place is very strong and well towered. Leland writes, "But the most beautifullest part and gallant building for lodging is the north side where is a right sumptuous piece of stone

¹ Pipe, 28 Hen. II., m. 2, dors.

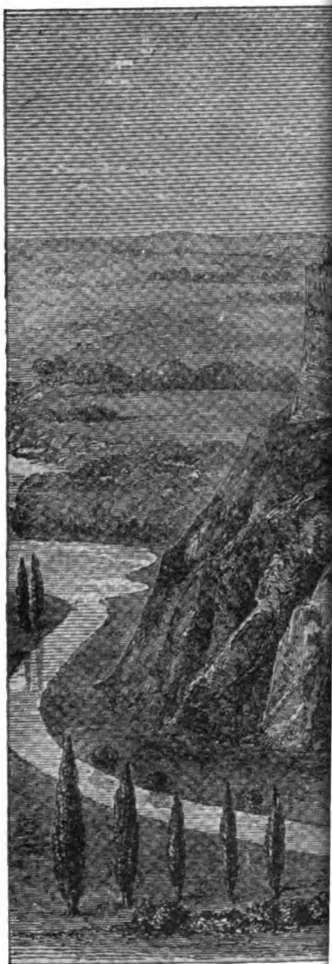
² Pipe, 29 Hen. II., m. 8; 30 Hen. II., m. 7, dors.

³ Pipe, 32 Hen. II., m. 8.

⁴ Pipe, 32 Hen. II., m. 8.

⁵ Pipe, 33 Hen. II., m. 12; 34 Hen. II., m. 15, dors.

PLATE II



work, one excellently goodly tower of three heights with marvelous fair compaced windows. So that surely this north part is an exceeding fair piece of work."¹

By the death of Henry II., a new struggle for the Crown brought the castle again into notice. Henry II. was succeeded by his son Richard, who soon left England on his crusade. Differences and discord had already arisen between Richard and his brother John, and Richard being so soon far away, John gathered a force—such seemed to be always at hand—and besieged Richard's castles. Coming before Nottingham, by the help of traitors within, he took the castle in 1191.² Three years later, in 1194, Richard on his return hastened to Nottingham³ ("*Rex iratus venit*"), and with a strong force laid siege to and after three days' resistance recovered the castle and quickly hanged those who had previously betrayed it.⁴ He came with a great multitude of men and such a clamour of trumpets and clarions ("*cum tanta hominum multitudine, et sonitu tubarum et buccinum*") that those within the castle on hearing and seeing it were astonished and alarmed and "trembling came upon them." Yet, not knowing that King Richard had returned, and supposing this all done to deceive them, it was determined within to resist any attack. This further incensed the King, who, after getting so near the walls that the archers within could "pierce his men at his very feet," ordered an assault. In this many on both sides fell, the King himself slew one knight with an arrow, and presently so far prevailed that he had taken some outworks thrown up outside the gates and burned the outer gates. On the 26th March he ordered his stone engines to be ready, being determined to make another assault. He also ordered gibbets to be erected within sight, and on these he hanged some prisoners taken. On 27th March the constables of the castle sent out two messengers to the King, and these, after an interview, returned and told what they had seen. Then William de Wendeval and Roger de Mountbegum went out with twelve others and threw themselves on the King's mercy, but they returned to the castle no more.

¹ *Itinerary*, Vol. I, fol. 112.

² Wm. of Newburgh, *ed.* Howlett, 338.

³ *Itinerary of Richard I.*, 446.

⁴ Roger Hoveden, 238.

On the 28th the castle surrendered on mercy for life and limb and worldly honour.¹ Next day the King viewed Sherwood and Clipstone, seeing them for the first time, and was greatly pleased and returned to Nottingham the same day. On the 2nd April he went again to Clipstone to meet the King of Scots and remained there, the 3rd being Palm Sunday. On the 4th he left for the south.²

In spite of all his troubles and the judgment passed against him for his work at Nottingham, John was crowned King 27th May, 1199.³ In A.D. 1200 he was at Nottingham and Clipstone, and at Clipstone on the 19th March regranted and confirmed by charter to Nottingham all the customs and liberties as granted by Henry his grandfather (Henry I.) and by Henry his father (Henry II.) to hold in peace and quiet fully and wholly, with augmentations made by himself. He confirmed also the Merchant Gild. The charter was further confirmed in 39 Henry III. (1255) and again in 56 Henry III. (1272). The day of the fair was changed in 1 Richard II. (1377-8) and the charter again confirmed in 1 Henry IV. (1399-1400).⁴ The grant of Henry I. (1100-1135) must be especially noticed as it helps to connect him as the first to inhabit the castle of stone and lime.

The accounts and records now change somewhat, as instead of "works" or building, "reparations" begin, with occasional additions. In A.D. 1203 works in the gaol in the castle cost 15s. 3d. and the gaol of Nottingham 40s.,⁵ and £10 were remitted to Nottingham for necessities for the Queen and family. In 1204 John was at Nottingham.⁶ In 1205, 1207, and 1214 reparations are noted and food supplies, especially pork, recorded.⁷ In 1212 John, desisting from an attack on the Welsh, shut himself in the castle.⁸ In 1214 and in 1215 he sent men and horse and arms to the castle and did some necessary building.⁹ In 1216 Reginald Marc

¹ Roger de Hoveden, Vol. III. *Annales Monastici* (Burton), I, 192.

² Hoveden.

Annales Monastici (Morgan), I, 24.
Charter Rolls.
Chancellor's Roll, m. 17.
Liberate Roll.

⁷ Close Rolls, 6 John, m. 4; 7 John, m. 25; 9 John, m. 12.

⁸ *Annals of Waverley*, p. 268; Wm. of Newburgh, ed. Howlett, 513, 514.

⁹ Close, 16 Jno., m. 6, 11, 16; 17 Jno., 5-6; 18 Jno., m. 7.

was given all the lands of Robert de Chaurc (Cadurcis), for which he gave the services of three knights, in the castle of Nottingham.

In 1217, his first year, Henry III. was at Nottingham and continued the reparations. There is a charge for making a *garita* in the castle and repairing the walls, and £21 18s. 6d. were spent on the mills under the rock of the castle and £44 10s. 2½d. for soldiers and servants.¹ In 1218 was made a perambulation of the forest—"afforrested" by Henry, grandfather of Henry son of John.² In 1220 Gilbert Hawill received £4 13s. 1d. for himself and three "varlettes" and falcons and a robe for his work.³ In 1222 eight girfalcons were sent to Nottingham.⁴ In 1221 reparations continued and orders were made for the *armaster* (? guard room), and bailey, and to provide two good *petrarias* (machines for throwing stones) and two *mangonellos* (similar machines) and *picos* and cords and *fundas*, *querrelles*, *balistas* with ropes and *targias* (? barges), also carpenters, engineers, *balistarios*, and *mineatores*.⁵ Again in 1223 it was ordered that without delay the bretasch and palings of the garden and roads should be repaired.⁶ In 1264, by reason of a revolt, Henry surrendered the castle and went away to Rochester.⁷ As the troubles ceased he got his own again and soon began to enjoy himself at Nottingham.

In 1265 the sheriff was ordered "in his own proper person" to go to Blye to see twenty-five *dolia* (casks) of wine which Hubert de Burgh had there and if it were good to bring it to the castle. He was to choose also twenty-five other *dolia* from merchants' wine, good and durable, and place the same in the castle.⁸ Hubert was paid £46 13s. 4d. for twenty *dolia*, so presumably the other five in his lot did not suit the sheriff. Beef, mutton, and pork were also provided. Seventeen carcasses of oxen cost £16 9s., seventy-four pigs cost £6 11s., one hundred sheep cost £2 5s. 10d., and

¹ Close, 1 Hen. III., m. 24;
3 Hen. III., m. 3; 4 Hen. III., m. 13;
5 Hen. III., m. 20.

Close, 2 Hen. III., m. 19 dors.

³ Close, 5 Hen. III., m. 20.

⁴ Close, 6 Hen. III., m. 6.

⁵ Close, 5 Hen. III., m. 15.

⁶ Close, 7 Hen. III., m. 20.

⁷ *Annals of Osney*, p. 146; *Annals of Dunstable*, p. 231.

⁸ Close, 9 Hen. III.

three *braonis* cost 5s. In 1266 the expenses of Sir Roger de Leyburn, the governor, included the salaries of two knights, seven serving men, porters, carpenters, millers, macebearers, bakers, and cooks, cross-bow men and archers, the total garrison expenses for the year being £445 17s. 8d.¹ Archbishop Gifford was governor in 1270 and tried a little game for his own benefit. In some way a life interest in the mills and meadows seems to have become vested in another, as the archbishop wrote, "We have charge of the castle of Nottingham and understand that the mills and meadows belonging to it appertain to us as its keeper. Procure for us a letter from the King granting them to us."²

Edward I. succeeded to the throne in 1272, and but little seems to have been done or recorded at Nottingham for some years. The buildings in time again required attention, so that in 1299 (27 Edward I.) an inquisition was ordered, as to the state of the castle and the mills, and to restore, repair, and amend.³ The following return was made, with an estimate of the probable cost:—

	£	s.	d.
Covering the White Tower and repairing	1	0	0
A chamber under the tower—masonry and covering with lead	5	0	0
Bakehouse and brewhouse in the same Tower ..	4	0	0
The chamber of the chaplain between the said brewhouse and the bridge	14	0	0
Chamber at the bridge	3	0	0
Repair of the bridge towards the tower	16	0	0
Walls towards the park and ditch	5	0	0
The chapel, and the chamber of the Seneschal, covering and masonry	4	0	0
Another chamber	4	10	0
The hall and chamber of the King and Queen and wardrobe	2	0	0
The tower by the chamber of the King	2	0	0
Wardrobe of the King, carpenters, etc.	3	6	8
Walls, kitchen, etc.	12	0	0
Houses, stables, hospital, walls, and ditches ..	10	0	0
Mills, and mending three	6	0	0
Pools and weirs	20	0	0

£111 16 8

¹ Add. MSS., Brit. Mus., 34, 153.

² Chronicles, Vol. LXI; *Northern Letters*, p. 62, ed. Raine.

³ *Inquis. ad quod dam.*, No. 120.

⁴ *Accts.*, etc. Excheq. Q. R., Bundle 477, No. 18.

No immediate attention was given to this report, not until 1307 (1-2 Edward II.) in the reign of a new king,¹ when the expenses in the castle are duly recorded, "from the day next after the feast of St. Leodgar to the 25th April in the feast of St. Mark the Evangelist," and will be found of some interest. The great cost in this account is for building two chambers in the new works in the tower, £100 13s. 4d.²

In the labour list there is a charge for the stipends of four women, Elen Scot, Maye Scot, Elene Shep, and Jowet Shep, carrying mortar and serving the masons for six days at 1d. a day, 2s. Jowet here is the phonetic for Juetta, and Maye is probably a distinct name, not as now the diminutive of Mary. There is also a charge in this account for *carbo maritimus* (sea coal) ten loads, 5s. 4d. This is a strange item seeing the district to-day, and seems entirely contrary to the proverb which says:—

"Bear not to yon famed city on the Tyne,
The carbonaceous product of the mine."

Whilst coal had been worked at Newcastle long before this date and being carried southward by sea became known and is still known as sea coal, or in full, sea-borne coal, inland coal was not worked until later, and the question would be, Was it worked locally at this date, and if so was all pit coal as it came into use known by the old name of sea coal as distinguishing it from charcoal? Charcoal was in general use long after this date, and at this time, in 1330, Edward III. after inquiry granted to Richard Strelly, his yeoman, all dry stovens ("*omnes zucheos aridos, qui anglice vocantur stoven*") of Beskwode in Shirwode Forest, estimated to be of the value of one hundred shillings, with licence for him to make charcoal for his profit.³ Again, in 1336 the Abbot of Rufford had licence to grant to Henry de Edenstowe, the King's clerk, trees out of the forest of Shirewode sufficient to make a hundred quarters of charcoal.⁴ But going back in date to a yet earlier time, we learn that in 1257 Henry III., going to Chester, left the Queen at Nottingham, but she

¹ Index List, Foreign Accts., p. 117.
Pipe Roll, 15 Edwd. II., 28 dors.

² Accts. Excheq. Q. R., Bundle 477,
No. 19.

³ Patents, Pt. 1, m. 42.

⁴ Patents, 10 Edwd. III., Pt. 2,
m. 23.

found it impossible to stay there by reason of the smoke from the sea coal ("*quia apud Nottingham . . . propter fumum carbonum maris nullo modo potuit demorari*"). So the Queen left for Tutbury. Except to suggest that the chimney arrangements must have been defective, it is difficult to understand this record, especially without local manorial knowledge. If this coal were not local then it would be in fact sea coal brought from Newcastle to the Humber and then up by the Trent.

Edward II. continued his reparations and building in 1312; the windows of the Queen's chamber, the windows and roof of the tower, and the bakehouse and the mills were repaired. There were provided "shingul" nails, "spykyngnails," "souwyngnails," and new rods in the ditch between the mill and the rock of the castle.²

In 1315 repairs were still in hand. In the week in which was the feast of St. Blaises (*sic*) there were "divers works" in the houses, mills, and pools, and in the great hall, boards for the chekerhouse and the bakehouse in the tower, iron for the door of the chekerhouse and two new doors for the bakehouse, and covering the great stable and other houses. Then there were new windows in the great hall, seven locks for the great hall and guest chambers, the Queen's chamber, buttery, pantry, and the constable, and hooks for the windows in the chamber next the parochial chapel ("*juxta capellam parochialem*"). Outside there were charged a hundred hurdles, and piles driven in repairs to the weirs, and "howatrys" and "sherys" on the weirs. The mills were named Sparrow mill, Swallow mill, Doune mill, Dosse mill, and Gloff mill. There is, again, a charge for eight women carrying turf and mortar four days and a half at 1½*d.* a day, and two men at 2*d.* a day.³

In 1321-22 there was another considerable outlay, an account of which may be given more fully as showing the wages and customs of the time. In the charges for expenses and payments on the work of two new chambers in the tower, the master carpenter was paid for nine weeks and two days at 3*s.* 6*d.* per week, and four other

¹ *Annales de Dunstable*, p. 203.

² *Accts. Excheq. Q. R.*, Bundle 477, 478, No. 1.

m. 20, 6 Edwd. II.

³ *Accts., etc. Excheq. Q. R.*, Bundle

carpenters fifty-four days at 3*d.* per day, two days being deducted for festivals. Godfrey de Wynton, carpenter, and two mates were paid for a hundred and thirty-five days, 4th October to 25th April, three days' feasts deducted, at 5*d.* a day, and five other carpenters, 4th October to 16th December, fifty-two days at 5*d.* per day, two days' feasts being deducted. William de Lincoln and twelve mates, carpenters, were paid for fifty-two days at 4*d.* per day. John de Norfolk and four others received 4*d.* a day for bringing oaks from Bestwood and Schirwood. The masons come next. William de Bramcote for twenty-four weeks was paid 3*s.* per week. Robert de Ocle and two others, masons, received 4*d.* a day for a hundred and forty-one days, three days' feasts being deducted. Robert de Pillesgate and four mates for forty-one days received 4*d.* a day; Richard de Leyk and twenty others received 3½*d.* a day; and Walter Sutton and seven others were paid for forty-six days at 3½*d.*, two days being deducted for absence at festivals. Simon de Pecco and fifteen others getting stone on the old tower and making mortar and serving, forty days at 1½*d.* a day. Thomas Knave and three others, masons in the said work, were paid 1½*d.* a day for ninety-five days, and Elene Shep, the same already found at the same work in 1315, with three other women, not now named, received 1*d.* per day for ninety-five days for serving the said masons. Finally there was the getting stone in the quarry of Odelinge at 2*d.* a day, and the carriage of lead at 1½*d.* a day; plumbers received 6*d.* a day, smiths 5*d.*, a decorator 3*d.* There is a charge for a hundred and eighty quarters of chalk, stone from Baseford and Stanton, and for "spykyngs" and other nails and necessities.¹ In 1323, by order made at Nottingham, the sheriff was to pay William de Embleby, carpenter, and William de Bramcote, mason, three hundred marcs by instalments, to complete well and truly the chimneys, doors, windows and ironwork in the tower, the timber coming from Bestwood and Shirwood.² It can be seen here how our place names preceded by "de" imply origin only and not ownership.

¹ 15 Edwd. II., m. 28, No. 167.

² Close, 17 Edwd. II., m. 39.

In 1325 (19 Edward II.) there were further reparations to the houses, weirs, and mills, and to the tower, the "tabulment" and gables of the new chamber and of the old chamber, the hall of the King and his chamber, and the alure. Also the outer bridge and wall next the ditch; and the alure in the middle bailey, the stone of the bridge, the lead on the towers and the doors and windows.¹ All this building and adding of this time of Edward II. may draw attention to Leland,² who describes "the stately bridge with pillars being beasts and giants over the ditch into the second ward, this ward being exceeding strong with towers and portcullos," and then notices "the most gallant lodging where Richard brother of Edward IV. built of stone a goodly tower of three heights, the other part also, and compassed with fair windows." Richard "as I have heard" added another loft of timber with round windows also of timber.³ What Leland saw may well be taken as fairly exact, but what he heard only may very well be passed; but by substituting Edward II. for Richard what he heard would be fairly true.

In 1327, his first year, Edward III. was at Nottingham,⁴ and with him it seems to have been a favourite abode. In 1330 the defects in the castle were again examined, and it certainly seems curious how often this was necessary. But it will be remarked that now, save, as may be expected, in the King's chamber, the chief expenditure is for the outside and garrison purposes. The report required the covering the great and high tower, new casting and replacing the old lead, mending the bridge towards the entrance to the great tower, which ought to be newly made, and making two new doors before the said tower. Mending the little chamber beyond the entrance to the said tower and the granaries there, which ought to be pulled down and rebuilt. Making a new kitchen and mending and covering the great hall with windows, and the chamber of the seneschal, the treasurer, and others in the bailey. The bridge in the said bailey to be newly made. The way

¹ *Inquis. ad quod dam.*, No. 165, p. 284.

² Leland, fol. 111.

³ *Itinerary*, Vol. I, fol. 112.

⁴ *Chronicles and Memorials*, Vol. LXI, Northern Letters.

from the chamber of the King to the chapel of the King and repairing the walls of the great chapel and the *interclausura* (screen) of the said chapel and for new boards and a table.¹ In 1334 there were further charges for timber from Beskwoðe—"a mighty great park"²—and stone for the castle, carpenters and masons working on the Black Tower, a plumber in the chamber of the King and the chamber *juxta* the Black Tower and on the wardrobe and the chapel of the Queen, and again six women carrying turf at 1½*d.* a day.³ But this did not suffice, as in this year, it "being brought to the knowledge of the King that the houses in the castle and the walls and towers, and the mills in the suburbs required repair," he ordered the sheriff to survey and repair to the cost of £40. The previous cost for this year was £30, and there was an order for £40 for the year 1335.⁴ In 1340 the King enclosed a park by the castle called Larkdale, between the hill called Wyndeserse and land late of William de Crophull opposite the castle.⁵ Additions were made to this from time to time.⁶

In 1345 the account is, for the first time, in English.⁷

In 1353 (27 Edward III.) Stephen Romylowe is constable and returns his account for expenses for divers defects in the houses and chapel in the castle, duly vouched for by Robert de Norwode, then mayor of Nottingham, and John de Tumby, burgess,⁸ and some other charges which the said Robert and John could not testify. Paid for stone, iron, lead, and glass, bowls, "ladels, rydels, kyttes and vattes," and for two ladders of 28 feet, and two others of 22 feet, a cable of 35 fathoms, and making one "ferne." Four hundred glasses of divers colours were received from Westminster from Robert Campsall, clerk of the works, and five hundred and one "quarters" of white glass; all used in the windows of the chapel in the castle. Then the return shows us how

¹ Accts., etc. Excheq. Q. R., Bundle 478, No. 2.

² Leland.

³ Accts. Excheq. Q. R., Bundle 478, No. 3.

⁴ Originalia, Rolls 26, 28, 35.

⁵ Ancient Deeds, Vol. II, p. 162, A 3 174.

⁶ Close Rolls, 17 Edwd. IV., 14 Edwd. IV.

⁷ Accts. Excheq. Q. R., Bundle 478, No. 17.

⁸ Pipe, 27 Edwd. III., m. 43.

exactly these accounts were kept. At the end the materials used up and worn out are accounted for, the others being returned to store. Thus there were "consumed" six bowls, five "syner'," four "ladels," four "ridels," two "cribor'," two "kittes," three "tribul'," and three "vattes"; and so there remained four ladders, one cable, and one "ferne." In 1357 there were repairs to the outer gate on the south, to the bridge of the upper gate towards the tower drawbridge, to the chamber next the other tower in the upper bailey called the Morryschamber, and to the house on the outer gate called Fetherand.¹ For the corbels of the Morryschamber the stone was brought from Mawnsfeld. A cord of 21 fathoms was provided for the well, and there is a charge for carpenters making an engine called a "ferne."

The week's work was until nine o'clock ("*post horam nonam*") on Saturday, which was thus reckoned half a day; the wages were consequently for five days and a half.

In 1357 Stephen Romylowe charged for reparations to the houses, walls, and windows, and for ropes, ladders, stone, and lime used.² In 1360 the hall of the Queen was repaired, a new hall built for the constable, and repairs made to the middle and the outer gates.³ In 1362 Romylowe repaired the hall of the King and the chamber annexed to the eastward, mended the walls of the upper bailey towards the south, covered the bakehouse, made a buttress next the middle gate, and mended the bridge next the outer gate.⁴ In 1362, with the hall, a chapel and mills had their turn, the expenditure being fully set out for making a chapel and a kitchen in the castle and four mills outside the same and mending and repairing defects, the charges amounting to £276 3s. 1d.⁵

At this time a return tells us that the men of Nottingham paid the King £52, if paid (*blancus*) blanche, or white,

¹ Accts. Excheq. Q. R., Bundle 478, No. 4.

² Pipe Roll, 31 Edwd. III., m. 37 dors.

³ Accts. Excheq. Q. R., Bundle 478, No. 5.

⁴ Originalia, p. 273, Pipe Roll, 36 Edwd. III., m. 41.

⁵ Accts. Excheq. Q. R., Bundle 478, No. 6; Pipe Roll, 36 Edwd. III., m. 52 dors. (xiii).

which sum was extended to £54 12s. (*numero*), counted, current, or ready money, as contained in Roll XVI (Edward III.) and Roll III of King John. Presumably the "white" payment implied sterling silver, against the inferior money passing at the time. One reason given for summoning the Parliament this year was the feebleness of the coins.¹ Further the men of Nottingham owed £8 for increment of the town, as in Roll XVI (Edward III.) and in Roll XII of Edward son of Henry. Also the men of Nottingham owed 32s. 6d. for two farms, *viz.* for rent of houses and for the toft of the Moneyers (*Monetarii*), as per Roll XVI (Edward III.), and Roll I of King John. The Telarii or Weavers paid 40s. for their gild, as per Roll XVI (Edward III.), and Roll II of King Henry II., and they owed £21 10s. for past years. The 40s. were duly paid, and the account ends with the note, "Owing £21 10s."²

In 1366 Stephen Romylowe, still constable, accounts for new building a tower towards the west called Romylowe's tower and for mending and supporting the walls of the castle towards the west, and for two chambers of stage, *i.e.* of timber frame work, next the said tower to the north newly built, and for another chamber of stage next the said tower on the south newly built, also for a new wall built extending from the west wall to the chamber on the middle gate containing in length 180 feet; there was further a charge for the front of the common chapel, for gutters for rain water, and for repairing and mending the mills and weirs, and other minor defects. The time occupied was a hundred and four weeks, the total cost £384 4s. 0½d.³ The stone used was from Baseford and Sedlyng, the timber from Shirwode and Lyndhurst. Again, there is a payment for *carbo marinorum* (sea coal) for the lime burning, and two hundred loads of water carried to the masons cost 5s. The working week was five days and a half. An interesting roll for local purposes. The Romylowe tower mentioned here does not show clearly either in the ground plan or the restoration drawing, but the

¹ Rolls of Parlt., II, 271.

² Pipe Roll, 36 Edwd. III., m. 22.

³ Accts. Excheq. Q. R., Bundle 478, No. 7.

wall across the court is seen. Two rectangular projections are seen on the west side; one may be the Romylowe, the larger perhaps, as it is so near the wall crossing to the middle gate and the houses. Both, however, are towards the west and well placed to support the wall.

In 1367 (41 Edward III.) Romylowe provided a font with a cover in the chapel, and paved and whitewashed the said chapel, and paid for a bell with a clapper, as also for two chests for the vestments and ornaments.

In 1368 the Damoiseil chamber was repaired, and other houses. There were provided four stone balls, five catapults, one spear, two sieves, a cart rope of 16 fathoms, and one tub or vat. Of these there were expended or used up two balls, three catapults, one spear; and so there remained two balls, two catapults, one cart rope, and one vat to return into store. Sixty-four oaks were brought this year from Lyndhurst in Shirwode.¹ A mantel-stone from Baseford for the Damoiseil chamber cost 21*d.* There was added also a dividing wall 46 feet long, 8 feet high, with battlements, 3 feet thick, covered with lead and with a porch outside. There was also a charge for windows and for a door with "slothe" and "sneke," i.e. a latch raised by a string through the door. A load of "maillion" was provided, and gates for the great bridge of the castle called the Drabridge. The materials came from Lyndhurst.² In 1372 and 1375 repairs continued, as in 1377, when the chief charge is for stone, iron, lime, wood, and *carbo maritimus* (sea coal), for making a new tower over the gate of the castle.³ In 1378 and 1379 small expenditure continues, a boat and other necessities being provided; and in 1389 the old timber of the chapel in the castle was sold for 50*s.*⁴ In 1395 the kitchen was repaired and the doors and windows of two chambers, the gates on the bridge and the doors and windows to the "wryghthouse," and glazing two windows in the King's chapel. There seem to have been guests at this time, as the account paid for a lock for the old door of the King's chamber, 6*d.* The same for the door of the

¹ Foreign Rolls, 42 Edwd. III., F.

² Accts. Excheq. Q. R., Bundle 478, Nos. 8, 9.

³ Foreign Rolls, 51 Edwd. III., m. D.

⁴ Foreign Accts., 2 Ric. II., m. B; 3 Ric. II., m. K; 12 Ric. II., m. E.

great hall, for the chamber of the Duke of York, for the chamber on the south part of the chapel, for the door of the chamber in which the lord of Darbe lies, for the Hobart chamber, for the Queen's chamber, and for others, all at 6*d.* per lock.¹ The account of William Peverell, knight, defunct, for 1400 (2 Henry IV.) shows a receipt of £160 and an expenditure of £161 4*s.* 7½*d.*²

During this reign, in 1407, a quarrel arose which resulted in a duel between two foreigners, fought at Nottingham, a strange proceeding to us, but common at the time. In the preparations, the account of Oliver Maleverer, chivaler, duly charged expenditure for timber, ropes, and cords for making the bars and lists. The timber was bought in the park of Ilkestone, and the cutting and carting cost £8 3*s.* 3*d.*³ This was not the first case at Nottingham, as in 1179 (24 Henry II.) Robert de Trusselea paid half a marc for duello and in the next year the same.⁴ This plan or custom was introduced by the Normans and was in fact a single combat as an appeal to Providence, the innocence of right being with the winner. In this case the quarrel was between John Bolemere and Bertran Usana, both of Bordeaux. Bolemere tells his story that one day Usana said to him—

“Mestre John Bolemere, je vous vuille monstrier une chose grand et marvellouse par ma foy.”

Bolemere answered, “Il me plaist bien, monstrez moi ceo que il vous plerra.”

“Certes,” dit Bertran, “les Engleys sount mauvais gentz et pleins de grandes outrages, et sachez Bolemere qu’il faut que nous departons hors de lour Seignuries.”

Bolemere answered, “Seynte Marie, sire! comme cest chose ceo poet faire? que la ville, q’ad este tant loiale a la corone d’Engleterre, par touz jours du temps passè et ferra a la grace de dieu desore en avant; ne comment pourroient vivre les pources laborers et les subgitz du roy nostre dit Seignur quant eux ne purroient

¹ Accts. Excheq. Q. R., Bundle 478, No. 14.

² Foreign Accts., m. D.

³ Foreign Accts., 8 Hen. IV., m. C.

⁴ Pipe Rolls, m. 6 dors., m. 7 dors.

vendre lour vins, ne avoir autres merchandises d'Engleterre ainssy comme eux ount acustume?"

"Il dist—lessez estre Bolamer, qar bien vivrons sonz eux, qare nous taillerons la moyte de nostres vignes et si ferrons duble dedeinz."

"Jeo respondi—sire, ne me parles plus de telle matiere, qar je voudroie mielx murrer que me tenir a vestre opinion."

So after more conversation they quarrelled, and the matter coming before the King, he appointed the 12th of August, before him at Nottingham, for the fight. The parties appeared and fought well but without great result, until the King cried, "Ho! Ho! Ho!" the signal for closing the combat. The event was duly certified by the King under the great seal dated at Westminster, 20th June, 1408.¹

In 1423, the account being on paper for the first time, three carpenters called "mylnewryghtys" working on three mills making three "mylnehyrstes," three "drawewhelys" and "les haxeltres" for the same, three "coggewheles," three "meylearkys," "les waterallys," and mending the groundwork, cost 100s.² In 1478 Gervaise Clyfton, squier, receyvoir of the King's diverse lordships, manors, and fee ferme within the shires of Nottingham and Derby, charged for buildings and reparations in the castle and making ponds in the park. The smith for ironwork, and for candle and paper bought, stone from Wollaston, Baseford, Trowell, and Hasilbarowe, and baring and digging the same stone, and divers persons for carriage of the same, some hired by the day, some by "grette." Board for "durras" windows and the floors, glass for the windows, and painting the King's arms. Timber for the battlement of the great chamber, "tyle" and "breeke," "hirdells" and "fleykys" for making the scaffold, straw, ropes and cables, sand, stone, tubs and sows, bearing barrows, wheel barrows, shovels, "bolles," dishes, "syves," gloves for the masons, poles of brass, tin and sawder, chalk and "cooles," "thalbord" for covering, wainscot, and other necessities, and

¹ Rymer, *Fœdera*, Vol. VIII, p. 539, ed. 1709.

² Accts. Excheq. Q. R., m. 13, Bundle 478.

carriage of lead from Haddon in the Peake.¹ Gervase had to ride to the King to get his money, but in the end the total receipt was £825 19s. 4½*d.*, and the expenditure £22 19s. 11*d.* more. But the expenditure included repairs at Clipstone and payments for annuities to foresters, and other things. The keeper of the herd and deer at Langton harbour in Shirwood had 4*d.* a day. As showing the duties attaching to the office of constable there may here be noticed the grant in 23 Henry VI. (1444–45), to Ralph, lord Cromwell, of the office of constable of the castle of Nottingham and the office of seneschal and the custody of the forest of Shirwood and of the parks of Beskwood and Clipston and the woods of Billowe, Birkland, Runwood, Ouselande, and Fulwood in the same, and the herbage and agistments of the parks and woods aforesaid, also the mills of Nottingham called Castle milnes, the waters of the Trent and Lene in Nottingham and liberty of fishing in the same, and all meadow under the said castle called King's meadow and Constable Holme, with the pasturage called Conyngarth otherwise Castell Apelton and Nulldham, with three other parcels of meadow and other meadows and also the goods and chattels of felons and fines and other full liberties.²

Changes in domestic habits about this time produced changes in house accommodation, and those castles not providing the necessary requirements became gradually neglected.

In 1525 (16 Henry VIII.) a survey of Nottingham was ordered and made. The report says "that the ablements of war in the castle were seventy-five billes, thirteen gunnes called faucons, sixteen chambers for the same gunnes, four wegges, three cofers with arrows, four score shef of arrows that stande over brode, oon barrelle of gonne powder, sixteen pellets of lede and stone, and oon molde to caste pellets. As to the deokay and ruyne, first a part of the roff of the great hall is fallen doune both tymber and lede. Also the new buyldyng there is in deokay of tymber, lede, and glass. The Kynges chapell, the lodgynges over the wardroppe,

Aects. Excheq. Q. R., Bundle 478,
No. 16.

² Patent Roll, Pt. 1, 23 Hen. VI.,
m. 10.

the lord stewards lodginge over the buttre and other dekays of the kechyn and the houses of office longinge thereto in tymber, lede, tyle, and other necessaries. Also the brydge goynge up to the dongeon, the bridge at the inner gate, and the bridge at the utter gate be in great ruyne and deokay, with divers other dekays ther in stonework, tymber, lede, and glasse. Also the lodginge in the parke called the Roche is in deokay and ruyne in tymber, lede, tile, and glasse." Clipstone was returned as also "deokayd."¹ Leland, who visited the castle a few years later, says he saw three chapels and three wells, one well being of great depth. "Much of the west side of the inner ward, as also the hall and other things, be in ruins."²

Reparations continued in the time of Elizabeth. For the ten years 1560 to 1570 a report and account show the expenditure as for—

	£	s.	d.
Tynne and soulder	11	2	0
Nails, ironwork, and wages	40	4	3
Tyle, bricke, lyme, and lathes	52	2	8
Glasse wroughte and sette uppe in the castle—four chests containing forty-six shefe	16	0	0
Wages	50	8	0
Masons' work and wages	127	5	8
Tilers' and plasterers' work	40	10	7
Leade	86	0	0
Wages	73	12	8
Soulder	0	14	0
Stonework	12	17	5
Allowed the surveyor	13	6	8
Plummers, glazeors, carpenters, tylours, masons, and labourers	398	13	6

There were consumed or used also "nine foder of lead, seventy-eight tonne of tymber, and sixty-eight tonne of tymber and twenty-eight trees."³

Next the story of the last eventful history must be told. After long trouble and bickering between the King, Charles I., and the Parliament, a civil war broke out. Foreseeing this event, the King left London and went to York in March 1642. From there in July he

¹ Rentals and Surveys, Roll 12.

² Leland, *Itinerary*, fol. 111.

³ Harl. MSS., 368, fols. 130-133.

made a tour round about to test the feelings of the population towards him, and so on the 21st July he came to Nottingham¹ and then returned to York. On the 12th August was issued a Proclamation dated and printed at York, requiring the aid and assistance of all his subjects on the north side of Trent and all within twenty miles southward thereof (for the suppressing the rebels now marching against him), "that according to their allegiance they attend our person upon munday the two and twentieth day of this instant August at our town of Nottingham where and when we intend to erect our standard royall in our just and necessary defence."² Accordingly on the date named his Majesty arrived at Nottingham, and at once raised his "standard royall," his flag of defiance, his ensign of war against the Parliament. From Nottingham, dated nine o'clock at night, a letter says:—"This day about six at night his majesty came weary, out of Warwickshire to Nottingham and after half an hour's repose commanded the standard to be brought forth, his majesty, the Prince, the duke of York and divers lords and gentlemen accompanying the same. As soon as it was set up his majesty called for the printed proclamation, mended with pen and ink some words misprinted or not approved of, and caused the herald to read it three times and so departed."³ Another pamphlet gives "the credible information from Nottingham that his majesty hath set up his standard there, and hath been under it himself three several days and made proclamation, etc."⁴ This was all confirmed in a few days by the issue of "a true and exact relation of the manner of his majesties setting up of his standard at Nottingham on munday the 22 of August, 1642, etc.," with "the form of the standard as it is here figured and who were present at the advancing of it."⁵

The title page of this rare and very interesting pamphlet, with the woodcut thereon, is here reproduced (Fig. 1).

¹ *Annals of Nottingham*, Bailey.

² "The Proclamation of His Majesty, etc." folio.

³ "Speciall Passages," No. 3.

⁴ "Certain Special and Remarkable Passages, etc."

⁵ King's Pamphlets, Brit. Mus., Vol. LXXI.

The writer tells that "Munday, being the 22 of August in the morning his majesty left his forces before

A true and exact Relation of the manner of his Maiesties setting up of His Standard at *Nottingham*, on Munday the 22. of August 1642.

- First, The forme of the Standard, as it is here figured, and who were present at the advancing of it
Secondly, The danger of setting up of former Standards, and the damage which ensued thereon.
Thirdly, A relation of all the Standards that ever were set up by any King.
Fourthly, the names of those Knights who are appointed to be the Kings Standard-bearers With the forces that are appointed to guard it.
Fifthly, The manner of the Kings coming first to *Coventry*.
Sixtly, The *Cavalieres* resolution and dangerous threats which they have uttered, if the King concludes a peace without them or hearkens unto his great Councill the Parliament : Moreover how they have shared and divided *London* amongst themselves already.



FIG. 1. TITLE PAGE OF PAMPHLET, WITH THE SETTING UP OF THE STANDARD OF CHARLES I.

Coventry and with some lords and others in company rode to Leicester where he dined that day at the Abbey

House the Countess of Devonshire's house. Presently after dinner the King again took horse and with his company rode to Nottingham where was great preparation for the setting up the standard that day as appointed. Not long after the King's coming to the town the standard was taken out of the castle and carried into the field a little on the back side of the castle wall. So soon as the standard was set up and his majesty and other lords placed about it, the herald made ready a proclamation declaring the ground and cause of the act. But before the trumpeters could sound, his majesty read it over to himself and disliking some passages corrected or altered them with pen and ink making it difficult for the herald to read. After the reading the multitude, estimated at two thousand who came only to see the manner of the thing, threw up their hats and with other such expressions, cried—God save the King. Not long after it being toward night the standard was taken down and again carried into the castle with the like state it was brought into the field. The next day it was set up again, and his majesty came with it and made proclamation as the day before. The like also on wednesday, his majesty being also present. Each day it was carried out in great state, besides the lords and others of the court, three troops of horse and about six hundred foot were appointed to attend the taking it backwards and forwards. But since that it hath been set up with less ceremony, there not being a hundred persons that have offered themselves to his majesty." It seemed that only thirty actually offered, and these the King refused. The above daily setting up with less ceremony seems to have been continued until the 30th August, when by petition from the town it was discontinued.¹ "The likeness of the standard," says the writer in the first pamphlet (see the plate), "is much of the fashion of the city streamers used at the lord mayor's show, having about twenty supporters and is to be carried after the same way. On the top of it hangs a bloody flag bearing the King's arms quartered, with a hand pointing to the crown which stands above with the motto—Give Cæsar his due." The knights baronets

¹ "Nottinghamshire's Petition to the King."

appointed to bear the standard were Sir Thomas Brookes, Sir Arthur Hopton, Sir Francis Wortley, and Sir Robert Dodington. It was carried by Sir Edmund Verney as knight mareschal.

The above is a clear and minute account and description, evidently by an eye-witness. The woodcut shows the standard clearly, a fuller description being unnecessary. Here is seen a streamer with, next the pole, a square bearing the royal arms, then following, as the streamer narrows off, a portrait of the King, then a crowned rose, fleur-de-lys, and harp, finally the point properly bifurcated. The hand pointing to a crown and the motto are not seen in the cut, probably from want of space.

Of late there has been printed the copy of a letter¹ as from a gentleman near Nottingham to a friend in London, relating to this event. Unfortunately it is only a fragment, is undated and unsigned, and no reference is given as to its origin or whereabouts. The letter, in describing the standard scene, says:—"I came on wednesday night last from Nottingham where I saw the King set up his standard on munday night before. The manner whereof was this. His majesty came into the castle yard with the Prince, duke, Princes Robert (Rupert) and Maurice, the duke of Richmond and others and finding out the highest pointed hill in the yard from whence it might be perspicuous, the standard was brought in and there erected. At what time all the courtiers and spectators flung up their caps and whooped God save the King and hang up the Roundheads. After which the standard was thence removed to the highest tower of the Castle where it hangs blowing. It is a long pole like a may pole painted red on the upper end whereof hangs a large silk flag in form of an escutcheon with a red cross and two lions passant upon two crowns."

This letter evidently refers to and describes a different scene from the three others. The others tell of the great ceremony and parade of taking the standard out of the castle into the field; the letter evidently tells of a scene later in the castle yard after the standard was brought in and the special official act closed. Then there is a

¹ Hutchinson's *Memoirs*, Vol. I, appendix.

difference in the "whoop." The three accounts must be taken to refer to the standard royal, a special ensign of war, customary and used at that date; the letter must refer to a personal standard more like that of to-day and used on the castle on this occasion for the same purpose—to signify the royal presence. The second writer says that the one he describes was removed to the highest tower of the castle, where it was left to blow in the wind. The war standard would not be used for this purpose. It would, then, be the other as shown in the plate, which was carried out of the castle on the first day and daily, although with less ceremony after the third day.

The custom of raising a special ensign of war was early in use. At the Battle of Hastings the banner of Harold was sumptuously embroidered, and bore the form of a man in gold and precious stones representing an armed warrior going out to battle.¹ At the Battle of the Standard, so called, at Northallerton in 1138, the English standard bore on the top a silver pyx with a consecrated wafer therein and representations of St. Peter, St. John, and St. Wilfrid. Henry III. showed a war flag of red silk which bore a dragon sparkling with gold, his tongue of fire and eyes of sapphire. On other occasions such a flag will be found in use. It was not, however, what we call a standard; the name was gonfanon, large, long, and tapering, the point being slit or divided, thus forming two points. Its length was determined by the rank of the owner—the higher the rank the longer the flag—and it showed not his armorials but a badge and motto and had nearest the staff the English red cross of St. George. Trades and companies also bore such streamers, often very long, and usually swallow-tailed. No longer in military use, the name standard by custom now applies to the personal flag of the sovereign, but again, this being rectangular—escutcheon-shaped—is heraldically a banner, not a standard. Whilst at Nottingham the King, under date 25th August, sent a message to the Parliament suggesting the possibility of some arrangement. But matters had now gone too far. The Parliament replied, "Having received your message of the 25th August, as

¹ William of Malmesbury.

your majesty hath set up your standard against the Houses of Parliament and the whole kingdom, until the standard be taken down and your proclamations recalled, no answer can be given."¹ This message accounts somewhat for an error and for the consequent long doubt as to the date of the raising the standard. Clarendon in his history² writes, "The King came to Nottingham two or three days before the day appointed to set up his standard. Next day he went to Coventry." Then under date 22nd August he continues, "His majesty returned to Nottingham very melancholy the very day the standard was appointed to be set up." So far good, but in the next paragraph he writes, "According to proclamation upon the 25th day of August the standard was erected about six of the clock in the evening, a very stormy and tempestuous day. The King with a small train rode to the top of the castle hill, Varney the knight marshall carrying the standard, which was erected in that place with little more ceremony than the sound of drums and trumpets." This account refers clearly to the short proceedings within the castle, but contemporary writers saw no omens, make no mention of tempestuous weather. It is easy to prophesy after the event. The misfortune has been that Clarendon seems to have mixed up two dates and two events—the 22nd and 25th August. The 25th August was the date of the King's message to the Parliament and was not the standard day. Clarendon overlooked this in his own work, as he begins his next chapter, "When the King set up his standard at Nottingham which was on the 22nd August," etc. Yet the 25th has been officially taken as the day in the Parliament Journals, thus increasing confusion and causing doubt.

Leland³ in his notes says, "The towne hath been meately well wallid with stone and hath dyvers gates, much of the wall is now down and the gates saving two or three." Beyond this notice nothing seems to be known of these walls, and perhaps the only drawing in which they have been shown is that in the woodcut seen in the plate. Here, whilst the troopers are marching

¹ "His Majesties Message from Nottingham."

² Edit. 1888, Vol. II, pp. 289, 290, 291.
³ *Itinerary*, Vol. I, fol. 111.

out to the field behind the castle, the walled town of Nottingham—duly labelled—is seen in the distance. As already noticed, the town was burned in 1140 and again in 1153, and these events may have drawn attention to the necessity of protection. The first walling seems to have been in 1266–67 (51 Henry III.), when a patent for murage was granted for three years. By this patent nearly everything brought into the market paid toll or duty—for an ox or cow $\frac{1}{2}d.$, each salmon $\frac{1}{4}d.$, skins $\frac{1}{2}d.$, and cloth, horses, pigs, and iron were also taxed, each article and the amount to be paid being named. In 1269–70 the patent was renewed, and enlarged and continued from time to time until presumably the work was done. In 7 Edward I. (1279), Robert de Tiptoft was ordered to audit the accounts for the murage. In 1288 the money collected for murage was taken and assigned for the repair of the outer bailey of the castle. In 1293 something wrong occurred, as a commission was issued to inquire into and audit the murage accounts, the money having been diverted to wrong uses. There were also patents granted for pavage and for pontage for the repair of the bridge; as with the walling, these were continued or extended from time to time.¹

The King stayed at Nottingham until about the 13th September, when he left, his environment not being suitable. And here may be mentioned an episode which may be of local interest to many and which has also a general interest. When the King left London in March, 1642, soon after his arrival at York he had a travelling printing press sent him from London for official use under his official printer, R. Barker. On the 4th September, 1642, the King sent orders to York for the press to be brought to him at Nottingham,² but as he left so soon afterwards it was never set up; no

¹ Patent Rolls, 51 Hen. III., m. 20 (64); 54 Hen. III., m. 8; 3 Edwd. I., m. 22; 7 Edwd. I., m. 14; 8 Edwd. I., m. 7; 13 Edwd. I., m. 2; 16 Edwd. I., m. 5; 18 Edwd. I., m. 2; 21 Edwd. I., m. 12d; 35 Edwd. I., m. 18; 5 Edwd. II., Pt. 1, m. 19; 14 Edwd. II., Pt. 2, m. 2; 15 Edwd. II., Pt. 1, m. 2; 1 Edwd. III., Pt. 2, m. 26; 2 Edwd. III., m. 23 (42); 6 Edwd. III., m. 6;

8 Edwd. III. (5–21); 9 Edwd. III., Pt. 1, m. 24; 9 Edwd. III., Pt. 2, m. 21; 14 Edwd. III., Pt. 3, m. 20; 19 Edwd. III., Pt. 2, m. 3; 20 Edwd. III., Pt. 2, m. 8; 21 Edwd. III., Pt. 1, m. 20; 37 Edwd. III., Pt. 2, m. 18; 6 Ric. II., Pt. 2, 12, 18 dors.

² "The last true Newes from Yorke, Nottingham, etc."

printing at this time was done there. Nottingham thus just lost the distinction of having this early provincial press, which fell soon afterwards to Shrewsbury.

The King being gone, the castle fell into the hands of the Parliament. On the 20th November, 1643, the House resolved that Mr. John Hutchinson, afterwards known as Colonel—whose autograph is given on Plate I—be governor of the castle there.¹ Taking office accordingly, he found the place much neglected—the strong tower called the Old Tower on the top of the rock, and the towers of the walls, mostly down; the outer walls all down; an old pair of gates with turrets on each side in ruins, and no outworks save a breastwork at the outermost gate.² All this he set about to remedy. A pamphlet of the time, December, 1643, entitled, *A Discovery of the Treacherous Attempts to betray Nottingham Castle to the Cavaliers*, tells how the governor was tempted three times to betray his trust. He was promised £10,000; the command of the castle to be confirmed to him and his heirs; and to be made the best lord in Nottinghamshire. To all he returned scornful answers. His brother George also was tempted to deliver the Trent bridges for £3,000, but he too replied with scorn to a thing so wicked and base, that his spotless name should not be tainted with the foul blot of treason, he would not for a little gaudy dirt sell his soul.

The further events of the war must be considered a separate story distinct from the present purpose.

Fighting being over, in 1646 the Parliament began to order castles to be slighted and made useless. Besides that they represented long years of tyranny and oppression, they had during the war given more trouble than aid. Nottingham was spared in the first lot, and it was resolved, 1st March, 1647, that the castle be kept as a garrison with a hundred foot in it, but at the same time it was also resolved that the town of Nottingham be disgarrisoned and all new works slighted.³ On the 17th March, 1647, Captain Thomas Poulton was

¹ *Commons Journals*, III, 315.

² Hutchinson, *Memoirs*.

³ *Commons Journals*, V, 102.

appointed governor in the place of Colonel Hutchinson. All remained thus until 1651, when on the 19th March the Council of State considered "what castles and garrisons are fit to be demolished and disgarrisoned and how and when, and what walled towns are fit to be dismantled." On the 9th May, after further consideration on these points, it was ordered that a troop of dragoons be sent to attend the demolishing of Nottingham Castle, the two companies of foot now there to march to Major-General Hutchinson. On the 9th June the demolishing of Nottingham Castle was again approved and the previous order confirmed accordingly.¹ These proceedings would seem to have been influenced by the mayor and others, as the same day the following letter was sent to Major Thomas Poulton, governor of the castle, Thomas Comble, mayor, and Robert Reynes, John Martin, William Drury, William Richards, and John Mason:—

"We have had your letter as to demolishing Nottingham Castle and leave it you to see it done effectually within fourteen days, so that the castle and all the outworks and fortifications be altogether demolished before 10th November. We are content that Major Poulton have all the materials for his own use, he paying Daniel Judd £12 for his charges in sending some persons to view the castle in behalf of the Commonwealth, and for whatever any of you do herein you shall be indemnified against all men." The next day, 10th June, another letter addressed to the same informed them "that having given order for the demolishing Nottingham Castle and being informed that there is a great quantity of brass and iron ordnance, arms, ammunition, etc., belonging to the Commonwealth which will likely be embezzled if care be not taken, let them be sent by water to Hull and thence to the Tower of London, also let other provisions not mentioned which may be serviceable to the State be sent with an inventory so that the officers of the Tower may know what they are to receive."

Mr. Mayor and his neighbours did their work willingly and thoroughly, and Nottingham Castle disappeared.

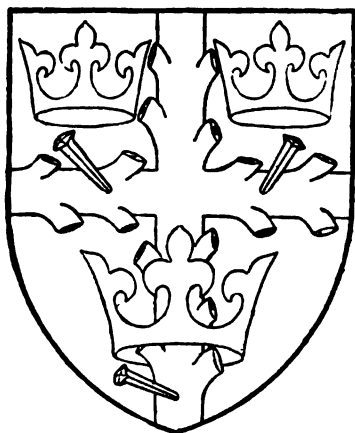
¹ State Papers, Domestic.

A NOTE ON THE ARMS OF COLCHESTER AND NOTTINGHAM.

By W. H. ST. JOHN HOPE, M.A.¹

In November, 1894, I had the honour of submitting to the Royal Archaeological Institute a paper on English Municipal Heraldry which is printed at length in the *Archaeological Journal*.² I have therein described the arms borne by the towns of Colchester and Nottingham in the following terms:

"The splendid seal of Colchester, made probably to commemorate the granting of a new charter by Edward IV. in 1461, bears on the obverse, in base, the arms of the town, *gules, a cross raguly argent, between two crowns in chief and passing through a third in base or*. As the principal subject of the seal is a figure of St. Helen, who is asserted to have been born at Colchester, clasping the Cross and three nails, the principal charge in the arms is easily explained, especially since on the seal it is shown pierced with three nails. The crowns of course refer to the patron saint of East Anglia, St. Edmund the King, whose martyrdom may be indicated by the red field.



ARMS OF THE BOROUGH OF COLCHESTER.

The arms themselves are of earlier date than the seal, since they also occur (but without the nails in the cross) in the initial letter of the charter granted to the town by Henry V. This also contains a seated figure of St. Helen, with the Cross held up before her by a kneeling king.

¹ Read at Nottingham, July 25th, 1901.

² Vol. lii. 173-197.

A precisely similar shield, but with the cross *vert*, is claimed as the arms of Nottingham, and so entered in the Visitation of 1569. I cannot, however, find any other or earlier authority for them, nor can I see how they are to be interpreted, or what possible connection they can have with Nottingham."¹

Since these words were written I have become convinced that my former conclusions are untenable. I should therefore like to submit for consideration a new explanation of the interesting arms under notice, which will, I trust, not only make clear the meaning of those of Colchester, but also show how the ancient town in which we are to-day assembled may with equal propriety lay claim to similar arms.

First let me clear the ground by withdrawing my too positive assumption that the crowns refer to St. Edmund. Mr. J. H. Round has pointed out to me that Essex was not included in East Anglia, so such a reference to the martyred king can hardly be looked for in Colchester, and assuredly not in Nottingham.

The next question that arises is, To whom do the crowns refer? A paper on "Ancient Legends connected with the Arms of Colchester" has lately been put forth by Mr. W. Gurney Benham, in which he discusses the various theories as to the crowns:

- (i) that they are derived from the traditional arms of a mythical British King, Beli Mawr;
- (ii) that they represent the three crowns in the arms assigned by the Heralds' College to old King Coel;
- (iii) that the crowns refer to the arms of the kingdom of the East Angles;
- (iv) that they commemorate a tradition that Colchester gave birth to King Lucius, the Empress Helen, and the Emperor Constantine;
- (v) that the King of England possessed considerable demesnes in Colchester, and so the crowns are introduced to show the royal importance of the borough;

¹ *Archaeological Journal*, lii. 180, 181.

- (vi) that the crowns refer to St. Edmund (as suggested by myself);
- (vii) that the three crowns have reference to the Holy Trinity.

Mr. Benham gives various reasons, all good in themselves, but which I need not repeat here, against these several theories, and suggests in their stead yet one other,

- (viii) "that the three crowns are symbolical of the three Kings of Cologne, whose translation to Constantinople by St. Helena, is recorded as a scarcely less wonderful performance than her Discovery of the Cross ;"

and in conclusion he remarks :

"On the whole, therefore, I think that we may assume that the arms of Colchester, as of Nottingham, were meant to tell the story of Saint Helena ; that the cross alludes to her discovery of the Holy Rood ; that the three crowns symbolize the Magi ; and that their position was, in all probability, intended to remind men of the third specially important discovery attributed to her, the discovery of the three Holy Nails."

I am sorry that after reading Mr. Benham's paper I am unable to accept his theory, but it has suggested to me yet one other, which I now venture to put forth, namely, that the three crowns have reference to, and must be regarded as being associated with, the three nails. This reduces the arms to perfectly simple elements : the Cross of our Lord, pierced by three crowned nails. We may thus at once see (i) why the lowest crown encircles the cross, because it then hovers over the third nail, and (ii) that the honour due to the hallowed nails, which are otherwise liable to be overlooked, is clearly and emphatically set forth by the crowns, in a manner quite in accord with mediaeval usage.

In my former paper I have stated, but I cannot recall upon what authority, that in the initial letter of the charter of Henry V. the Colchester arms are depicted "without the nails in the cross." This is a mistake, for the nails are shown quite clearly, each surmounted by a crown, and they so appear on the splendid town seal.

It will be seen that this new interpretation of the arms, so far as Colchester is concerned, identifies them more closely than before with St. Helen, who is represented on the town seals holding the cross and the nails.

With regard to Nottingham we can see our way a little more clearly, since we need no longer try to associate with St. Helen, in whom Nottingham had no interest, arms that may equally well refer to our Lord alone. These arms may, in fact, be regarded as the well-known emblems of the Passion reduced to their simplest elements.

I must confess to being still without earlier authority than the Visitation of 1569 for the assumption of these arms by the town of Nottingham, and in default of any evidence of the former existence here of any relics of the True Cross or of the three nails I can only suggest for the present that it is by mere coincidence that the arms of Nottingham are identical with those of Colchester, for the illuminated initial already referred to shows that in both cases the cross raguly should be green, or what the heralds now call *proper*.

ON SAXON CHURCHES OF THE ST. PANCRAS TYPE.¹

By C. R. PEERS, M.A., F.S.A.

The study of the earliest types of our ecclesiastical buildings has of late increasingly engaged the attention of antiquaries. Now that the later phases of our national architecture, from the twelfth century onwards, have become in their general outlines matters of common knowledge which anyone may acquire if he will, it naturally results that those buildings which cannot be arranged under any of the well-known headings have attracted more general and more careful notice than was formerly the case. It is not now necessary to contend for the existence of buildings which date from Saxon times as it was in the early days of the Institute; the question may be regarded as finally settled in their favour. But beyond this there is much to be done. Five hundred years of the history of English architecture, from 600 to 1100, have yet to be written, and though in a few instances materials exist for dating buildings belonging to this period within a few years, yet in the main comparison, and conjecture more or less probable, are the only guides.

Five years ago, at the Canterbury meeting of the Institute, Mr. Micklethwaite read a paper on Saxon church plans (printed in Vol. LIII of the *Journal*), which first put the subject on a sound and reasonable basis, and though in no way professing to be final, gave a working hypothesis which has so far stood the test of recent discoveries. The present paper is to some extent an enlargement of part of his argument, and deals with a class of buildings which he put at the head of his list, as representing the earliest non-Roman ecclesiastical buildings of which we have any remains still in existence.

Briefly, then, there is a small group of churches connected with each other by peculiarities of plan and detail

Read at Nottingham, July 25th, 1901.

and by tradition with the earliest days of the reintroduction of Christianity to the South of England by Augustine in the last years of the sixth century. These have become known as the St. Pancras type, from the church of that name at Canterbury, the most representative example of the group; a more appropriate name would be the Augustinian type, but as this would lead to confusion with monastic buildings of a later time, the accepted title must stand till a better is found.

The churches in question are as follows :—

Four in Kent—St. Martin's, Canterbury; St. Pancras's, Canterbury; St. Ethelburga's, more correctly St. Mary's, Lyminge; St. Andrew's, Rochester.

One in Essex—St. Peter's on the Wall, Ythanchester, near Bradwell. And possibly

One in Suffolk—the Old Minster at South Elmham.

And if the excavations now in progress at St. Augustine's, Canterbury, prove as successful as it is hoped they will, two more examples may be added to the list—Augustine's church of Sts. Peter and Paul, and Edbald's church of St. Mary.

The characteristics which connect them with each other and distinguish them from all other early churches in this country are :—(1) The use of a group of three arches in place of the usual single arch between nave and presbytery, a feature only found outside their number in two English churches—one of which, merely an adaptation of their typical plan to an aisled church, is Reculver, founded by Bassa, the mass priest, in 669, and the other is Brixworth, built about 685 by a colony of monks from Medehamstead; (2) the short and broad nave, and the small *porticus* or chambers opening from it; (3) their approximation to Roman detail, and the complete absence of all the characteristics of later Saxon work.

It may be here mentioned that they are all built on Roman sites, and with the exception of South Elmham are largely or wholly composed of re-used Roman material.

For historical references to them we are indebted chiefly, and indeed nearly entirely, to Bede, in his

Ecclesiastical History of the English People, written about 130 years after the coming of Augustine.

King Ethelbert of Kent, he says,¹ had a Christian wife, of the royal race of the Franks,² by name Bertha, whom he had received from her parents on this condition, that she should be allowed to preserve inviolate, with the assistance of a bishop named Luidhard whom they had assigned to her as a spiritual helper, the observance of her faith and religion.

In fulfilment of this condition Ethelbert gave to his queen the church of St. Martin, near the city of Canterbury, to the east, built of old while the Romans still dwelt in Britain.³ We are not told anything of its state of repair at the time, which after at least a hundred years of disuse can not have been very good. At any rate Augustine and his companions found it in use as a place of Christian worship, and installed themselves there, making it their headquarters till after the King's conversion, when they had greater freedom for preaching in all places and for building or restoring churches, and Ethelbert gave them within the city a place of abode suitable to their rank.⁴ This was perhaps the site of the present cathedral, which is thus described by Bede⁵:—"Augustine consecrated in the name of the Holy Saviour our God and Lord Jesus Christ a church which he had learnt was made of old within the city by the work of Roman believers, and there he fixed a dwelling-place for himself and for all who should succeed him."

He also built a monastery outside the walls, not far from the city, to the east, and in it, by his counsel, Ethelbert erected from the foundations, and endowed with various gifts, the church of the blessed apostles Peter and Paul, in which the bodies of Augustine himself and all the Bishops of Canterbury and the Kings of Kent might be laid. This church, however, Augustine did not consecrate, but his successor Laurence.

Augustine died in 604, and his body was buried close to the church of the blessed apostles Peter and Paul, outside the building, because it was as yet neither finished nor

¹ *Hist. Eccl.*, I, 25.

² She was a daughter of King Charibert of Paris.

³ *Hist. Eccl.*, I, 26.

⁴ *Ibid.*, l.c.

⁵ *Ibid.*, I, 33.

dedicated. But soon, when it was dedicated, he was brought inside and buried in the south *porticus* in a fitting manner.¹ Here also, while there was room, his successors were buried. This church, says Bede, has almost in its midst an altar dedicated in honour of the blessed pope Gregory.

The monastery and church of Sts. Peter and Paul were the first beginnings of the great abbey of St. Augustine, the site of whose church is now being explored, with the hope of perhaps coming on some traces of the very buildings which Augustine saw rising from their foundations but did not live to consecrate, and of that other church of St. Mary built some twenty years later by Edbald to the east of Ethelbert's church, and dedicated by Mellitus, who succeeded Laurence as archbishop in 619.

The church of St. Pancras is not mentioned by name in Bede's history, though it may be one of those which he says were built after Ethelbert's conversion, and the first reference to its early date comes from a mediaeval source, the chronicle of William Thorn, monk of St. Augustine's, written at the end of the fourteenth century. Being of so late a date, its value as a record is not great, but at any rate it tells of what was the accepted history of St. Pancras's at the time. There was, says the chronicler, not far from the city to the east, about midway between St. Martin's church and the city wall, a temple or idol-house, in which King Ethelbert was wont to pray after the manner of worship of his nation, and with his people to sacrifice to devils rather than to God. Which temple Augustine on his return from his consecration by Etherius of Arles purged from the pollutions and defilements of the Gentiles, and breaking in pieces the image it contained, changed this synagogue into a church, and dedicated it in the name of the martyr St. Pancras; and this was the first church dedicated by Augustine. There still is to be seen in the south porch of the same church the altar at which Augustine used to celebrate, where formerly the statue of the King had stood. This account, which is in form an adaptation from Bede's history, only altered to suit the

¹ *Hist. Eccl.*, II, 3.

context, is the source of the legend, current by the end of the fifteenth century, that Augustine's first mass in England was said at this altar, and that the devil, seeking to tear down the building, left the marks of his claws on its walls in the shape of two deeply cut grooves in the masonry, drawings of which dated 1755 are to be seen in Vol. II of Grose's *Antiquities*.

The establishment of the first church of St. Andrew at Rochester is chronicled by Bede,¹ who says that King Ethelbert built it from the foundations in the year 604, and that Paulinus was there buried in *secretario beati apostoli Andreæ* in 644.

The city of Rochester was sacked by Ethelred of Mercia in 676, during his invasion of Kent, when it is specially recorded that he defiled the churches and monasteries.² Putta, Bishop of Rochester, fled from his see and never returned, and his successor Cuichelm found it impossible to remain there "*prae inopia rerum*." So that it is probable that Ethelbert's church did not escape damage at this time, but it seems clear that it was not destroyed. In 726 Bishop Tobias was buried "in the *porticus* of St. Paul the apostle, which within the church of St. Andrew he had made into a place of burial for himself."³ The church is mentioned in 788 as the place "where the holy Paulinus rests," and again in 823. There is no further history of the building, and it cannot now be definitely settled whether the old cathedral church which Gundulf destroyed at the building of his new church about 1080, and from which he with great pomp translated the relics of the most holy confessor Paulinus, was Ethelbert's church of 604 or a successor of which we have no records or remains. Perhaps the traces of an early building discovered in 1876 underlying the wall of the south aisle of the nave of the present cathedral may some day throw light on the point.⁴

The story of the church at Lyminge is as follows :—
When Edwin of Northumbria was defeated and slain

¹ *Hist. Eccl.*, II, 3.

² *Ibid.*, IV, 12.

³ *Ibid.*, V, 23.

⁴ See *The Architectural History*

of the Cathedral Church and Monastery of St. Andrew at Rochester, by W. H. St. J. Hope, p. 21, and Plate II.

at the battle of Hatfield by the pagan Penda king of Mercia, Paulinus bishop of York fled for refuge to Kent, taking with him Ethelburga, Edwin's widow, the daughter of Ethelbert of Kent and Bertha his wife. Edbald, the then King of Kent, Ethelburga's brother, gave her his royal villa of Lyminge as a residence, and there she built a monastery in, or soon after, 633, and there died in 647, and was buried in the north *porticus* of the church, as was afterwards her niece and successor St. Mildred.

The monastery was raided by the Danes, but, as at Rochester, the church can have been only partly destroyed, for in 1085 Lanfranc, requiring relics for his new foundation in Canterbury, St. Gregory, caused the bodies of the two saints to be translated from the north *porticus* of Lyminge Church to the church of St. Gregory, and thereby started the great and long-lived squabble between the monks of St. Augustine's at Canterbury, and the canons of St. Gregory's as to which house possessed the authentic relics of St. Mildred, the details of which may be read in the polemic of Goscelin, monk of St. Augustine's, "*Contra inanes beatae Mildrethae usurpatores*," written about 1098, and now in the British Museum (Cott. MS., Vesp. B, xx, f. 260). Goscelin, who seems to have been present at the removal of the relics, speaks of Ethelburga's tomb as still existing, "*eminentius monumentum . . . in aquilonali porticu ad australem parietem ecclesiae arcu involutum*." And again, speaking of Ethelburga, he says, "*cujus in limingis eminentius et augustius creditur monumentum*."

The position of the tomb, in an arched recess in the north *porticus* against or near the south wall of the church, is not clear, unless the north porch and the south wall are understood as belonging to two different buildings. This would, at Lyminge, fit the case very well, as the present church is built just to the north of the old foundations, so that a north *porticus* of the older church could very well abut on the south wall of the later. Canon Jenkins claims to have discovered the site of both grave and *porticus* in the north wall of the apse just to the east of the triple arcade, but the evidence is inconclusive, and points rather to a later interment.

Historical references to the chapel of St. Peter on the Wall, Ythanchester, near Bradwell in Essex, will be given in the detailed account of the building, and need not be mentioned here. The Old Minster at South Elmham, Suffolk, has been connected with the mission of Bishop Felix, the Apostle of East Anglia, who gained the favour of King Sigebert, and set up his bishop's seat in *civitate Domnoc*, probably Dunwich, about 630. Here he remained for seventeen years. The fourth bishop in succession to him was Bisi, at whose retirement in c. 670 the see was divided and two bishops consecrated, Aecci to Dunwich, and Baduini to Elmham.

The reasons for considering that this Elmham was South Elmham in Suffolk, and not North Elmham in Norfolk, are set forth by Mr. Henry Harrod in the *Proceedings of the Suffolk Institute of Archaeology*, IV, 7, and my purpose here is not to offer any criticism on his arguments, but to consider whether the character of the ruined building known as the Old Minster affords any grounds for the supposition that it belongs to the early days of the East Anglian see.

Passing to a detailed description of the remains of these buildings, it will be well to take first the church of St. Pancras at Canterbury. Until last November only the southern and western parts of the site had been thoroughly examined, these being in the grounds of the Kent and Canterbury Hospital. The chancel and north half of the nave were in private possession, and the owner considering that pigs were preferable to antiquaries as occupants of the ruins, no further explorations were possible. But fortunately this desecration is now a thing of the past, and the whole area is in the hands of trustees and has been thoroughly and carefully excavated under the supervision of Mr. Hope and Canon Routledge, with the result that the plan of the whole building, with the exception of the eastern apse, which has been destroyed to the foundations, is now clearly to be seen, and much valuable evidence as to the details of the masonry, etc. has been brought to light. The church consisted of an apsidal presbytery about 30 feet 6 inches long by 22 feet wide, opening into a nave 42 feet 7 inches long by 26 feet 7½ inches wide by a

colonnade of four Roman columns, of which the base and part of the shaft of the southernmost remain *in situ*.

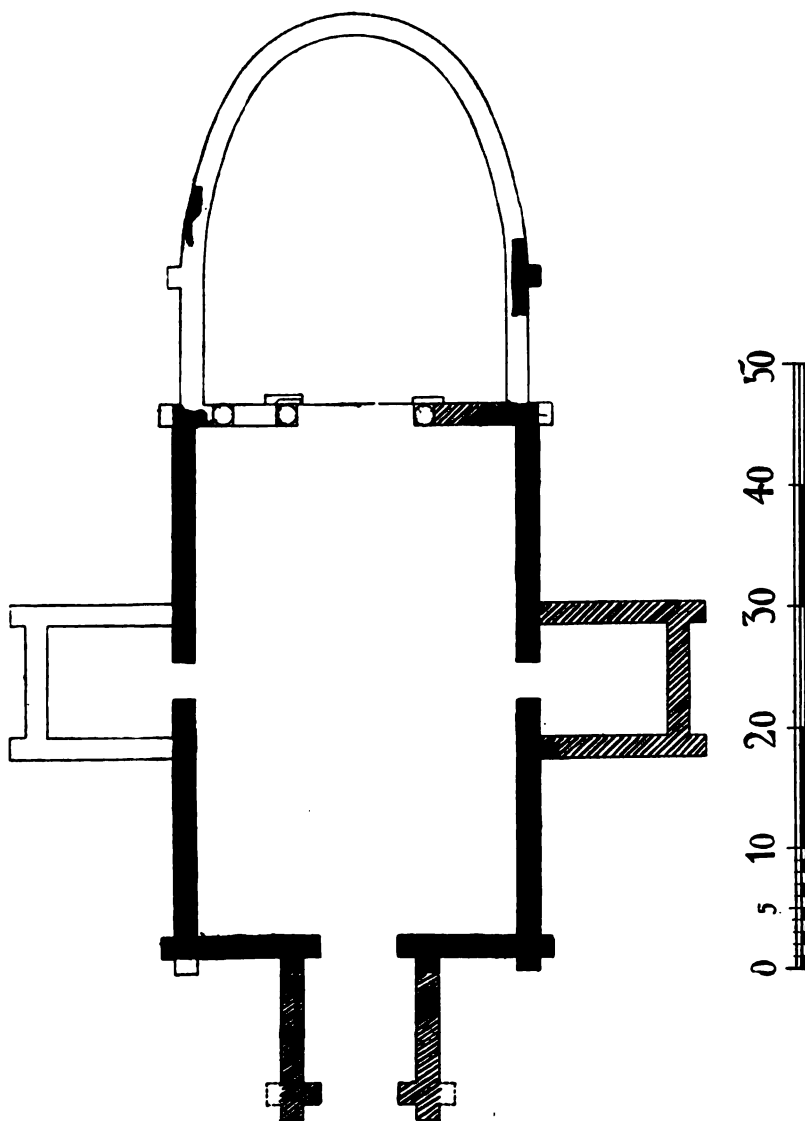


FIG. 1.—ST. PANCRAS'S, CANTERBURY.

In the centres of the north, south, and west sides of the nave were doorways leading into small rectangular

buildings, that at the west being an entrance porch, the other two chapels, probably entered from the nave only. These latter are clearly adjuncts of the type called *porticus* by Bede, and will be so referred to in this account. The thickness of the walls in all parts of the building is 1 foot 10 inches. The walls of the nave remain to a height of about 1 foot to 1 foot 10 inches, and are built of Roman bricks in regular courses, five courses to a foot, set in a yellow-brown mortar, and have been plastered inside and out. Courses of herring-bone brick occur in both north and south walls externally, in the north on both sides of the doorway to the northern *porticus*, within the space contained by its walls, and in the south to the west of the west wall of the south *porticus*. The mortar is of good quality and hard, and several large pieces of walling from the upper part of the walls are lying where they have fallen, in good preservation, though unfortunately nothing has yet been found which gives any evidence as to the windows or architectural features of the upper part of the walls. At the north-west and south-west angles were pairs of buttresses 1 foot 10 inches wide and of 1 foot 2 inches projection, of brick like the nave walls. There were similar buttresses on either side of the western doorway, of which more hereafter, and one at each of the eastern angles of the nave. All three doorways have plain square jambs, and may have had arched heads, though no evidence remains on the point. Those on north and south are 3 feet 1½ inches wide. The western doorway as originally set out was 7 feet 9 inches wide, but was altered during the building of the church to 6 feet 6 inches. It was further narrowed in the end of the twelfth century.

In the eastern wall of the nave is a colonnade of four columns having a central opening 9 feet wide, spanned by a brick arch, part of which still lies on the floor as it fell, and two narrower side openings, 4 feet wide, which may have had arches or flat lintels. These side openings were blocked up very early in the history of the church with a wall 1 foot 10 inches thick of Roman brick in white pebbly mortar. Of the columns only a fragment of the southernmost remains *in situ*, namely, the base

and about 2 feet of the shaft—enough to show that they were of a good period of Roman work, of 16½ inches diameter at the base, and therefore probably about 11 feet high when complete; they had doubtless formerly adorned one of the public buildings of Durovernum, and are the only wrought stonework in the Saxon building.

The presbytery was almost entirely destroyed, either at the rebuilding of the eastern part of the church in the fourteenth century or at an earlier alteration in the twelfth, if the many fragments of that date now to be seen in the ruined chancel walls may be taken as evidence for such an event; but sufficient remains to show that the side walls ran straight for about 10 feet to a buttress similar to those in the nave, from the eastern side of which the apse started. Within the space enclosed by the walls of the fourteenth century chancel no traces of the apse remain, its foundations having been destroyed in the interests of its late occupants the pigs, but externally enough of the springing exists to show that the plan must have been a half-ellipse, like that at Rochester, rather than a half-circle.

The northern *porticus* has completely disappeared; it was taken down in mediaeval times and its doorway walled up, but the marks of its abutment against the nave wall are clearly to be seen east and west of the blocked doorway, by breaks in the external plastering. The walls, or at any rate the lower part of them, were not bonded to the nave walls, and were built after them, though forming in all probability part of the original design.

The southern *porticus* measures 10 feet 6 inches by 9 feet 4 inches internally. The walls remain to a height of about 2 feet 6 inches and are built of Roman brick in white mortar, with joints wider than elsewhere in the church, four courses going to a foot instead of five. At either end of its south wall are buttresses of the usual projection. As in the northern *porticus*, its walls are not bonded to that of the nave. The remains of an altar against its eastern wall, though of a much later date, are of great interest as being the subject of the legend given by William Thorn, quoted above. The

walls of this *porticus* were standing in the eighteenth century, and are shown in illustrations to Stukeley's *Itinerarium Curiosum*, 1722, and Grose's *Antiquities*, 1755, the buttresses finishing with sloping brick heads about two-thirds up the height of the walls.

The western porch is of exactly the same dimensions as the southern, and doubtless the northern, *porticus*, but owing to the fact that its north wall formed part of the boundary between the monks' and lay folks' cemeteries of St. Augustine's Abbey, which boundary was not altered at the Suppression, this wall still stands to the height of 11 feet and more, and affords most valuable evidence as to the erection of the various parts of the church. It is built, as is the south wall, of which only a few courses remain, against the buttresses flanking the west doorway of the nave. These, in common with all remains of the nave walls now standing, are set in yellow mortar, as mentioned above. The porch walls show the white mortar, previously noticed in the southern *porticus* and the blocking of the eastern arcade, and are not bonded to the nave buttresses in their lower part. But at 3 feet 4 inches from the floor level the straight joint stops, and the nave buttress and porch walls are bonded together in such a way that it is clear that the porch was begun when the western nave wall was only 3 feet 4 inches in height, and that after reaching that level both walls were carried up simultaneously in the white mortar, which is to be seen overlying the yellow at the point of junction. If two other facts are added to this, namely, that the fallen fragment of the presbytery arch is built in yellow mortar, and that the mass of masonry lying on the floor of the nave abreast of the north and south doorways, and clearly being from the upper part of the nave walls, has white mortar, the story of the building of the church is clear. It was begun from the east, the presbytery and eastern wall of the nave built to their full height, the west nave wall built to about $3\frac{1}{2}$ feet, and the north and south walls to full height at the east, sloping down to the level of the west wall at their junction with it. Then came a break, in all probability a very short one, and building was resumed with the

white mortar, the nave walls were finished and the three porches built, and the church was complete.

Returning to the west porch. The north jamb of the western archway remains to a little above the springing, and shows that the arch was turned in brick, and was 6 feet $4\frac{1}{2}$ inches wide by about 11 feet high, of one square order. Two courses of bricks are set out at the springing of the arch to form an impost, and the whole was plastered inside and out. It is to be noticed that the external plastering consists of a coat of the mortar used in the walling, brought to a fair face. The internal plaster is not sufficiently preserved for an accurate description, but it may be noted that on one of the fallen masses of masonry in the nave a smooth white plaster $\frac{3}{4}$ inch thick remains, though it is not possible to say whether this is as old as the wall it covers. There were pairs of buttresses at the west angles of the porch, but of these only the two western appear to have been carried up.

A small piece of what may be the original flooring remains in the nave, close to the north wall, and west of the north doorway. It is of smooth white plaster, 6 inches thick, and although showing a reddish surface, in no way resembles *opus signinum*, a scratch through the surface coat at once showing the white plaster beneath.

The next example to be described must be that well worn battle-ground of antiquaries, St. Martin's, Canterbury. The church stands to the east of the city of Canterbury, outside the walls, on a site which rises rapidly from west to east. The parts of it with which we are now concerned are the nave and the western portion of the chancel. Taking the latter first, it will be found to consist of the side walls of a building 14 feet 4 inches wide and extending 18 feet eastwards from the present chancel arch, with walls of Roman brick 2 feet 2 inches thick, the courses measuring five to a foot. The north wall has been almost destroyed to give access to a vestry, and shows no features of special interest. In the south wall are two blocked openings, of which that to the east is a doorway 2 feet 2 inches wide cut straight through the wall, with brick jambs and semi-circular arched head with ragstone *voussoirs*,

set back at the springing line about $\frac{3}{4}$ inch from the jamb face. The original plaster remains in part behind the blocking wall on the soffit and jambs, light brown in colour and of a fairly fine texture. A break in the masonry all round this opening shows that it is not a part of the original building, though from its character it must be of Saxon date. Into the outer face of its western jamb is built a small piece of a fine-grained oolite, bearing part of a dedication inscription, perhaps

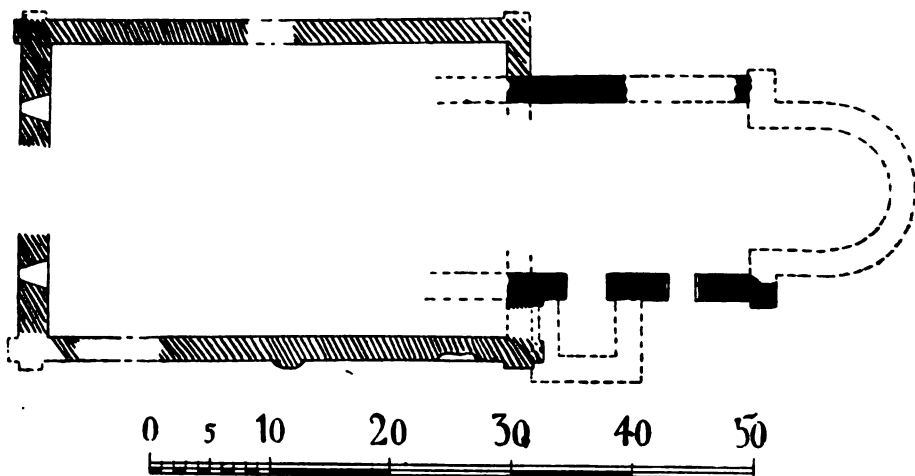


FIG. 2.—ST. MARTIN'S, CANTERBURY.

that of an altar, in good and well preserved lettering of an early type:—

//////N HONORE SCÆ . . .
ET OMNIVM SĪORVM

The second opening in the south wall, some feet west of the preceding, is contemporary with the wall, 3 feet 3 inches wide, with brick jambs straight through the wall, and a flat head with a heavy ragstone lintel. It formed the entrance to a small southern *porticus* now almost completely destroyed, though traces of the bonding-in of its east and west walls remain on each side of the opening to the height of the lintel,

and show that it was built of brick like the rest, with walls 2 feet 2 inches thick. Its width east to west was 4 feet 9 inches, and if the proportions of the remaining *porticus* at St. Pancras may be taken as a guide, it was probably a square or something like it, but no traces of its southern wall are to be found. The only fragment of the little building now to be seen above ground is a strip of brickwork of about 5 inches projection in the re-entering angle formed by the south wall of the chancel and the east wall of the nave. It seems to have been left when the rest of the *porticus* was destroyed, and formed the western half of the thickness of its west wall at this point, the eastern half being cut away, as the rough ends of the broken bricks show. It is now level with the face of the eastern buttress of the nave. When excavations were being made some years ago on this site, part of a floor of *opus signinum* was found near the sill of the flat-headed opening, the only remains of the *porticus* floor.

Returning to the main building—the present chancel—the evidence for the form of its eastern end is scanty. In the south wall externally the early brickwork stops with a straight joint just beyond a modern pilaster buttress, which is, however, the successor of an original buttress of somewhat similar form, and this straight joint runs through the wall and clearly marks the termination eastwards of the side walls of the early building. A rough brick inner face to the wall on the line of this buttress, and foundations projecting some 2 feet from this face under the chancel floor, suggest that there was a return here as shown on the plan, the central space being taken by an apse, though this last is purely a matter of conjecture.

A most important discovery which practically settles, if not the date, at any rate the relation of this building to the present nave of St. Martin's, was made some years ago by Canon Routledge, when he found under the floor of the nave traces of the continuation of the north and south walls of the chancel westwards from the chancel arch. Owing to graves, these could not be followed for any great distance, and so the plan of the western end remains unknown; but whatever it may have been, it is

quite clear that it could not have existed at the same time as the present nave, and must therefore either have disappeared before the building of the latter, or, which is more probable, have been destroyed when it was added.¹

The only other point to be noticed is that in the north wall, just east of the present chancel arch, below the floor line, are several projecting courses, as if there had been a cross-wall at this point.

The nave of St. Martin's is irregularly set out, being 24 feet 9 inches wide at the eastern end, and 24 feet 5 inches wide at the west; the north wall also is 4½ inches shorter than the south. The west wall is 2 feet 4½ inches thick, the other three 1 foot 10 inches thick, built chiefly of Roman brick and chalk blocks, with pairs of buttresses at the north-west and south-east angles and a single buttress somewhat east of the centre of the south wall. The masonry, rough and irregular in the first instance, has been much patched and repaired at various times, especially at the south-west angle, which has been rebuilt without buttresses, and in the middle of the north wall, where a doorway now blocked and destroyed has been inserted. But enough remains to show the construction, which is of courses of chalk blocks with bands, generally single, of Roman brick, at irregular intervals, and not continuous throughout the length of the walls, and in many cases not running horizontally.² The mortar joints are very uneven, in places as much as 4 inches thick; the original mortar seems to be whitish, full of small pebbles, like that at St. Pancras. The buttresses are tall and shallow, of 10-inch projection, having courses of chalk in their lower portions, and sloping heads of brick; that in the middle of the south wall is unlike the rest, being much shorter, and in plan a flattened segment of a circle, but was perhaps once similar to the others, as it shows signs of having been cut back to its present shape, and a patch of brickwork remains in the wall above it, at the level or

¹ There is a very good reason why the nave should have been built as far eastward as possible, cutting off the west end of the chancel for that purpose. The ground falls so quickly westwards, that a building placed ten, or even five feet farther west, would have needed a

great deal of extra walling and leveling up.

² The nearest approach to this kind of masonry occurs in the ruined chancel walls of the little church of Stone, by Faversham, though in that instance the work is much better and more regular.

the heads of the buttresses at the south-east angle, which looks like the bonding of a similar head. The building was doubtless plastered externally, but whether any of the original plaster remains it would be hard to say. A patch on the south wall, white, with pounded brick in it, looks early. All the mediaeval plastering has been taken off the inner faces of the walls, and by this means many important details have come to light, especially in the west wall, which has a central opening, long ago blocked up, 7 feet wide and 17 feet high, flanked by two windows now blocked on the outside by the walls of a fourteenth century western tower, and filled up with masonry flush with their inner face. Enough of this has been removed to show that they are splayed, though whether this splay runs right through to the outer face of the wall cannot be seen. Their jambs are of blocks of chalk, and ragstone. Their heads have had semi-circular arches in brick with wide joints; but of these only the springing remains, as the windows have been heightened by cutting away the heads and continuing the jambs upwards. The tops of the heightened openings are rounded, cut out of the substance of the wall, with no built arch. The 17-foot central opening before mentioned is of the same sort, having no dressings to the jambs and no arch in the head. It has either lost an ashlar lining or was finished with thick plaster to cover its irregularities. The upper part of the west gable has been rebuilt, and part of the head of the central opening has been destroyed in the process. The mortar in the jambs of the two windows is white, but in what remains of the brick arches it is pink, and identical with that used in Roman work. There also remain patches of plastering of the same colour on the wall near the windows, and on the south wall of the nave; and it seems probable that the whole interior was once covered with it. No traces of any windows in the north and south walls exist, though the present fourteenth century windows may be some guide to their position; nor is anything left to show whether there was a western *porticus*, or what was its plan. The heightening of the western windows seems to have taken place at an early date, and suggests the

addition of a western gallery entered from a room over the porch, which may at the same date have been carried up as a tower. The central opening may thus replace a western doorway with a window over it, as at Ythanchester. In the south-east angle of the nave, in the east wall, is a square-headed opening, blocked, having a brick north jamb, but otherwise very rough. It would give on to the site of the south *porticus* of the present chancel, but cannot have been connected with it, as the angle buttresses adjoining, which must be part of the original building, could not have been built if the *porticus* had been standing at the time. No

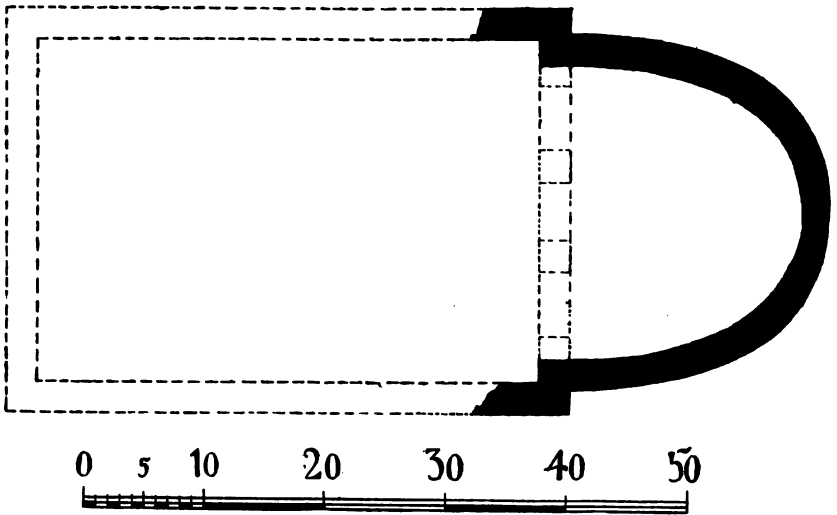


FIG. 3.—ST. ANDREW'S, ROCHESTER.

additional light can be thrown on its possible use from an examination of the outer face of the wall, as this is too much patched to be used as evidence of anything.

Of the two other Kentish examples, St. Andrew's, Rochester, and St. Mary's, Lyminge, little can be said, as little remains; but both by plan and historical evidence they can claim to be included in this group of churches.

In *Archaeologia Cantiana*, XVIII, 264, is a description by Mr. Livett of the finding of the Rochester building, in which he says that the walls remain at highest to

only 20 inches, of irregular masonry, with sandstone quoins and wide mortar joints, the mortar being hard, of sand, with a few shells and a little charcoal; there were traces of herring-bone work, and of the apse walls only two courses of Roman brick remained—not enough to show whether the whole wall was of Roman brick, or merely banded with it. The thickness was 2 feet 4 inches, with a foundation course of tufa and ragstone, on concrete full of small pebbles and blocks of ragstone. The plan shows the curious elliptical shape of the apse, which can now be paralleled by that of St. Pancras's. The west front of Rochester Cathedral crossed the site of the presbytery of this little building, but the east

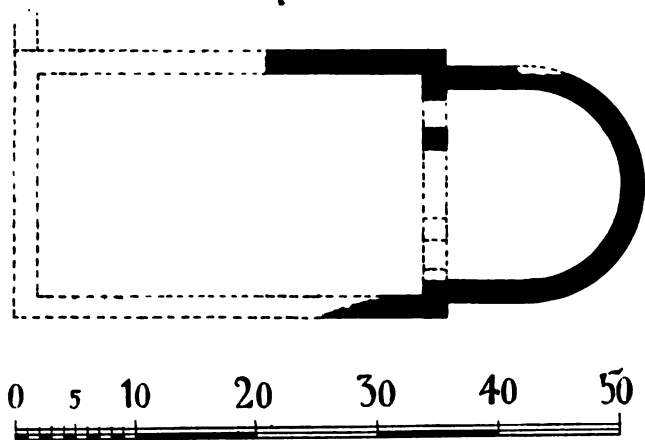


FIG. 4.—ST. MARY'S, LYMINGE.

part of its nave was completely uncovered, and showed a strong foundation wall across the chord of the apse, giving good grounds for the presumption that the triple arcade existed here as elsewhere. The western half of the church could not be excavated, and so no traces of the *porticus* mentioned by Bede have come to light.

St. Mary's Church, Lyminge, has likewise nothing but the lowest courses of its walls to show; they are 1 foot 10 inches thick, of Roman materials, and the evidence for the triple arcade is good, as may be seen from the plan. No trace exists of the *porticus* in which St. Ethelburga was buried with St. Mildred, which, as before noted, seems to have been standing at the end

of the eleventh century. Traces of Roman buildings abound on the site, and a Roman foundation underlies the western end of the nave.

The chapel of St. Peter on the Wall, Ythanchester, in the parish of Bradwell in Essex, is built, as its name implies, across the line of the wall of the Roman fortress of Othonae, which guarded the mouth of the Blackwater. It consists of a nave 54 feet 3 inches long by 26 feet 3 inches wide,¹ formerly opening at the east by an arcade of three equal arches into an apse of the same width, and rather more than a semi-circle. At the west of the nave is a doorway 5 feet wide, once covered by a

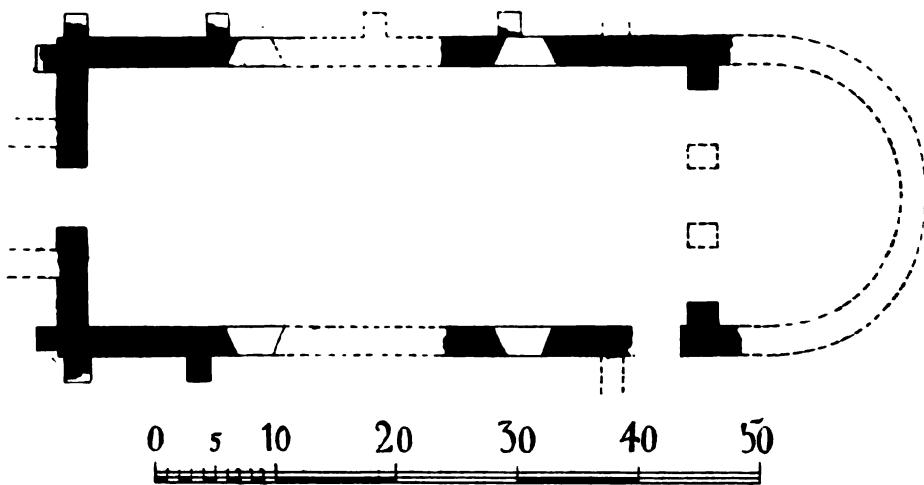


FIG. 5.—ST. PETER'S, YTHANCHESTER

western porch, which in later times was carried up as a tower, and has now entirely disappeared. This building has been claimed as one of those referred to in Bede's *Ecclesiastical History*, III, 22, where an account is given of Cedd's work among the East Saxons about 653, when he was consecrated Bishop of East Saxony by Finan of Lindisfarne. "He made," says Bede,² "churches in various places, especially in the city which in the Saxon tongue is called Ythancaestir, as also in that which is named Tilaburg; the first of these places is on the bank of the river Pent, the second on

¹ These are external measurements.

² *Hist. Eccl.*, III, 22.

the bank of the Thames." At Tilbury it would, perhaps, be unreasonable to expect to find any relic of this early time, but the lonely situation of Ythanchester, on the estuary of the Pent or Blackwater, has preserved for us, in a more perfect state than any other building of this type, what may with considerable reason be identified as the church built by Cedd for his Essex converts from the ruins of the Roman Othonae. The apse has disappeared, and of the triple arcade only the responds and part of the side arches remain—sufficient, however, to determine their span. The western porch has gone, and the church having in recent times been used as a barn, a cart-way has been driven across the nave, destroying some 12 feet of the middle of both north and south walls. But a great deal of the original building is left, the nave walls exist to their full height, about 25 feet, and the east and west gables are only slightly lowered. And owing to the fact that the place seems to have been deserted early in mediaeval times—in 1442 it is mentioned as burnt with fire and evidently not at that time repaired—there are practically no mediaeval alterations to obscure the early work.

The materials are a coarse oolite, septaria, and Roman bricks, chiefly if not entirely taken from Roman buildings. The mortar is brown and very hard, containing sand and pebbles and fragments of brick. At the western angles of the nave are pairs of buttresses of irregular width, 1 foot 10 inches to 2 feet 3 inches, and of 2 feet projection, of stone rubble with a few brick courses at their base, and heads of brick in horizontal courses, sloping back to the wall face at an angle of about 50 degrees. Remains of similar buttresses exist on the north and south walls, two on the north and one on the south. They are all about 14 feet high, and die into the wall at the level of the sills of the windows. The western angles of the nave are built in their upper part with blocks of oolite and bands of brick, and below with heavy quoins of Roman ashlar, and as the buttresses come to within 6 inches of the angles, their sides next the angles are built with a straight joint against the ashlar face of the quoins, bonding being, of course, impossible; and this has led to the

statement in Vol. XLI of *Archaeologia*, pp. 451-452, that these buttresses are additions, which, however, is clearly not the case. An examination of the masonry of the walls shows that the coursing is irregular and uneven; for 8 feet from the present ground-level are stretcher courses of Roman wrought and squared stones; above this the stones are smaller and uneven, as if no more facing stone was available on the site, and the hearting of the Roman work was used; mortar joints are very wide and the stones often laid on end, as if to make them go as far as possible. But the chief interest of the building, apart from its plan, centres in the windows. Of these parts of five remain, two in the north wall, two in the south, and one in the west, over the west doorway. The west window, which originally looked over the roof of the west porch, and must have afterwards been blocked by the tower raised on the porch walls, is 4 feet 5 inches wide internally, with a semi-circular arched head, both jambs and head being built in brick and splayed right through the wall, being 3 feet wide at its outer opening, which is now blocked with modern brickwork. The bottom course of the jambs, internally, is of ashlar cut to the splay. The other four windows have splayed jambs similar in all respects to the western window, but have flat heads with wooden lintels, which, though probably not the originals, are at any rate their successors. The width of the openings at the outer wall face is 3 feet, and 5 feet 3 inches inside, and they must have been filled with pierced woodwork screens or *transennae*, either fixed or in the form of shutters; the mid-wall planks which are still to be seen here and there in our later Saxon churches are an adaptation of the same idea. The sills are of brick, stepped in horizontal courses, and were no doubt finished with a plastered splay.

Remains of two doorways exist, both with jambs straight through the wall. The western doorway is 5 feet wide; it is blocked with modern brickwork and has lost its head, which may have been either arched or flat. The second doorway is in the south wall just west of the presbytery arches. Only the lower part

remains, and shows that it was 4 feet wide, with ashlar jambs. It may have opened into a small *porticus*, of which there is no trace beyond the bonding of its west wall. There may have been a similar arrangement on the north of the nave, where the wall has been altered and marks of bonding are to be seen externally.

Of the triple arcade, as before mentioned, only the responds and part of the side arches are left. The responds are of 2 feet projection and 2 feet 5 inches wide, of brick, with a stone base course and another halfway up. At the springing of the arch two courses of brick are set out on the soffit, and the arch, which is of brick, semi-circular, and apparently slightly stilted, is set back from the face of the responds at its springing. From the curve that remains it seems that the three arches were of equal span; whether they were carried by stone columns or brick piers does not now appear. On the wall face above the arcade, and elsewhere inside the nave, are patches of a fine white plaster, very thin, which may be the original finish. There is no evidence as to the nature of the floor.

Of the eastern apse nothing can now be seen, but its roof was lower than that of the nave.¹

The internal western angles of the nave show a curious system of bonding, by sections and not by courses, which produces an alternation of straight joints between the west and side walls which might be very misleading if the building were not as well preserved as it is, and in any case is an interesting commentary on the straight joints between practically contemporary pieces of masonry at St. Pancras's, Canterbury. The walls of the west porch give another instance, being built without bond against the west wall of the nave for some 4 feet, and then bonded regularly as far as traces of them can be seen.

The last on the list is the ruined building known as the Old Minster, South Elmham, Suffolk. It stands within a quadrangular enclosure of some four acres called the Minster Yard, surrounded by a bank and ditch,

¹ See *Archæologia*, XLI, 447, and for a description of the building in *Archæological Journal*, XXXIV, 218, 1867.

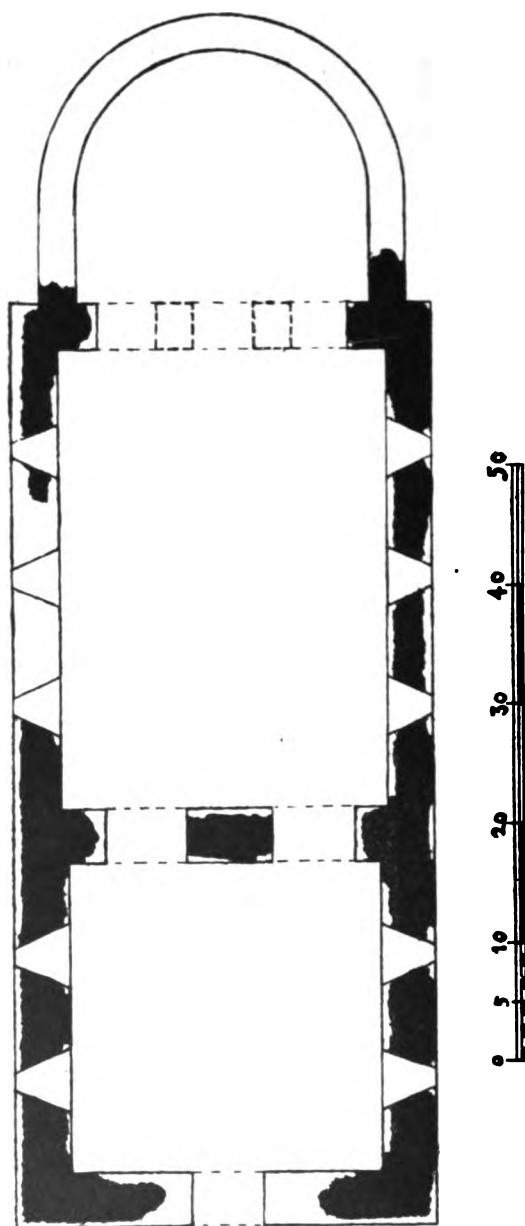


FIG. 6.—THE OLD MINSTER, SOUTH ELMHAM.

and possibly of Roman origin. Mr. G. E. Fox, in his paper on "Roman Suffolk" (*Archaeological Journal*, LVII, 110) considers it to be Roman in form, but says that the evidence of Roman occupation or use is not established, as although Suckling speaks of "urns filled with burnt ashes and bones" having been found there, another authority, Mr. B. B. Woodward, says definitely (*Proceedings of the Suffolk Institute of Archaeology*, IV, 4), that nothing whatever has been discovered within the enclosed area, though it has been cultivated and drained throughout. Nor is there any definitely Roman material to be found in the walling of the "Minster." The building consists of three parts, an apse to the east, a nave, and a western chamber. It is 101 feet 5 inches long and 35 feet wide, built of flint rubble set in exceedingly hard mortar; the facing, both internal and external, has been of flints and pebbles brought to a fairly even face, about 6 inches thick. This facing, together with all salient angles, has been extensively stripped off for building material; it remains chiefly on the upper part of the outer face of the south wall, and at all re-entering angles throughout the building. The whole outer face of what remains of the north and west walls has been removed. Of the eastern apse nothing but foundations is left, and a short piece of the west end of the south wall, 3 feet thick. The apse was slightly stilted, 21 feet 3 inches deep by 24 feet 5 inches wide in the clear. The nave has walls 3 feet 10 inches thick on north, south, and east. The north wall is almost entirely destroyed, with the exception of 6 feet at the west end, which remains to a considerable height, and contains the western jamb of a window. The south wall is better preserved, and retains parts of three windows, the easternmost of these being left to nearly its full height, and showing part of the head. All arrises are gone, and all facing, except a little on the splayed jambs. The south-east corner externally is in better condition than any other piece of the outer face; the salient angle has indeed been picked off, as elsewhere, but otherwise the walling is in good order, though much overgrown with ivy, and a certain amount of plastering, of the same quality as the mortar, remains. And here a question

arises as to what was the character of the angle dressings. Owing to its excellent quality, the mortar surfaces exposed by the removal of the designs remain sharp and unaffected by weather, and show accurate casts of the bonding ends of the materials used. These casts by no means suggest wrought stone quoins, but rather flints and rounded pebbles, the removal of which has, in some cases, not destroyed more than 3 inches of the angle. In one of the windows of the western chamber, to be mentioned below, so little of the external angle of the jambs is missing that it is very difficult to imagine that anything but flintwork dressings have been used. Against this it must be mentioned that very small ashlar quoins are common in the neighbourhood, and that the appearance of the window jambs in the north wall of the western chamber suggests that wrought stone has been there employed.

The opening from nave to apse is 20 feet 9 inches wide, the responds being square, of the full thickness of the wall, 3 feet 10 inches. The south respond has lost its salient angles, but retains some 5 feet of its facing on all three sides. A foundation of the full width of the responds runs from one to the other, at a higher level than the presumable line of the nave floor, so that there may have been a step here.

The western chamber is an exact square of 26 feet internally, with walls 4 feet 6 inches thick on all four sides. All stand to a considerable height, in places as much as 14 or 15 feet. In the eastern wall are two openings with square jambs on either side of a central pier, giving access to the nave. There is no evidence whether they were arched or square headed. They are 6 feet 8½ inches wide, and retain parts of their jamb facing, in one case, up to 6 feet from the ground, but have lost their angles. In the north and south walls the window openings remain, two on each side. The eastern window in the north wall, and the western in the south, exist to their full height, except for a little masonry at the crowns of the arches. Heads, jambs, and sills are all splayed through the wall from inside to out, the splays of the sills being flatter than the rest; they retain at their junction with the jambs some

of the plastering with which the whole surface of the opening was originally covered. The sight-line of the sills is about 7 feet above the present ground level, and the window openings when perfect were 5 feet high to the springing, with semi-circular heads, and 1 foot 7 inches wide in the clear. There is no trace of built arches in the heads; the destruction of the wall surfaces makes it impossible to say whether there were facing arches on either or both sides; what remains of the heads is formed in the flint rubble, laid, no doubt, on centering as the walls went up.

As before mentioned, there are some indications of wrought stone dressings on the inner face of the jambs of the windows in the north wall, but the outer face of the west window in the south wall, where the wall surface is perfect to within a few inches of the window opening, certainly suggests that here, at least, they did not exist. The west wall has lost much of its central portion, especially up to 5 feet from ground level; above that, where the wall is more out of reach of the casual spoiler, it overhangs considerably, being held up by the strength of the mortar, and shows part of the jambs and springing of a large arched central opening 6 feet wide, the springing being 10 feet above the ground level, and the opening not splayed, but square through the wall as far as it is left.

Throughout the building the putlog-holes are a most noticeable and curious feature. Roughly speaking, they are triangular, with the apex of the triangle upwards in the lower part of the walls, and reversed, *i.e.* with the apex downwards, in the upper parts. They are also unnecessarily close together vertically, four rows occurring in less than 14 feet of height, so that the scaffolds would have been not quite 3 feet 6 inches apart; but this can be paralleled elsewhere in ancient work. They go about 14 inches into the walls, generally tapering inwards, and in many instances those on the inner and outer faces correspond exactly in level and position. Nearly all have a coating of mortar, and their greatest width averages 8 inches. Those with the apex downwards, occurring chiefly in the upper part of the walls—there are two such lower down at the east of the nave—

naturally have a flat stone or the like above them ; in some cases they seem to have had thin tiles or boards in this position, now gone, but leaving casts of their shapes in the mortar coat which surrounded them.

As will at once be noticed, the Old Minster differs considerably from all the buildings just described, both in plan and in the great thickness of its walls. Nor is the character of its masonry like any of the rest. The question therefore arises, Is it to be counted as one of their class, or is it of a later date ? If of a later date, the shape and proportion of the windows is quite unlike any later Saxon or early Norman examples,¹ both in height and width of the opening, and as there are besides none of the ordinary and characteristic later Saxon masonry details, it follows that the earliest assignable date will be 1140 or thereabout. The masonry might also belong to such a date, and the stone dressings, if they existed. Even the very hard mortar would not be impossible, though very exceptional at the time. But with the plan it is a different matter. Let it be granted that at this date the chancel arch of a country church might be as much as 20 feet 9 inches in span, and that the 7 feet 2 inches of abutment, considering the excellent quality of the mortar, is sufficient. But where is there another instance of a middle twelfth century church with entrance doorways like the present, all with jambs neither rebated nor splayed, with a western entrance of so unusual a character, or with a western chamber such as this ? Again, if an early date is to be assigned to the church, the following resemblances are to be noted :—It has only one entrance doorway—at the west end, and of considerable width (6 feet). The three “St. Pancras” churches whose west ends remain, St. Martin’s, St. Pancras’s, and Ythanchester, are entered by a doorway in the same position of considerable width (St. Pancras’s 7 feet 9 inches, altered during building to 6 feet 6 inches ; Ythanchester 5 feet ; St. Martin’s destroyed, but there is 7 feet between the rough faces of the early work) and have no other entrance. The proportions of the nave of the Old

¹ That is, in small churches like this. The case of a large late eleventh or early twelfth century church does not apply here.

Minster are in round numbers 38 feet by 27 feet; St. Martin's nave is 38 feet by 24 feet, St. Pancras's 42 feet by 26 feet, and Rochester 42 feet by 28 feet. The wide foundation across the eastern end of the nave is just what one would expect to find if the triple arcade had existed, and is hard to explain satisfactorily on any other hypothesis. A sleeper wall as massive as this, to carry nothing more important than a stone step, or to steady the jambs of an arch on which no great weight can ever have been placed, is, to say the least, an unusual arrangement.

The windows are all splayed right through the wall, as are all windows in the "St. Pancras" type and in other early Saxon buildings, as Jarrow; and all other openings have square unrebated jambs, a characteristic of Saxon work of all dates. The great height of the western entrance suggests that it cannot have been an outer doorway, but must have opened on to a porch, another regular feature of early Saxon work, as at St. Pancras's, Ythanchester, Monkwearmouth, Corbridge, and Brixworth.

There remain the two points in which the Old Minster differs from all known Early Saxon churches—the thickness of its walls, and the western chamber. Thinness of wall is a marked feature in all "St. Pancras" churches, and generally in all Early Saxon buildings. The western chamber is a very rare feature in England; I only know one instance of anything like an exact parallel to this at South Elmham. It is to be found at Daglingworth, Gloucestershire, where there is a late Saxon church of nave and square chancel, with at the west of the nave a chamber exactly 16 feet square, externally of the same width as the nave, and with walls 3 feet 9 inches thick, as against 2 feet 8 inches in the nave and 2 feet 4 inches in the chancel. Only the south wall of this chamber remains intact; the west has been destroyed at the building of a fifteenth century tower, the north "restored" into modern smugness, and the east, which opened to the nave with a central arch of some width, completely removed. The entrance doorway of the church is in the south wall of the nave, just east of the site of the east wall of the western chamber, and the north

nave wall is destroyed for an arcade, so that no evidence of a north doorway remains, and whether the western chamber had a western doorway is equally beyond discovery. Another western chamber is to be found at Boarhunt, Hampshire, again a late Saxon church, entered by north and south nave doorways, east of the line of the east wall of the chamber. This east wall has been destroyed, and nothing can be said as to its opening to the nave. Here the chamber is not square, nor are the walls thicker than the nave walls. It has a modern west doorway, and it is not clear whether it replaces an original opening. Foundations of a western chamber at Methley, Yorkshire, are said to have been lately found, but I have not been able to get any description of them. The curious Norman church of Gillingham, Norfolk, is sometimes given as an instance of a building with a western chamber, but is not really a case in point. Its tower, narrower than the nave, is planted across it some 20 feet from the west end, and is carried by two massive walls 4 feet thick pierced with arches 6 feet 8 inches wide, thus cutting the nave into two parts, but the western part is intended to be part of the nave, and has the regular north and south doorways into it, and also a west doorway.

Here I must leave the question for the present, in the hope of getting sufficient evidence to come to a definite conclusion some future day. The many early features shown by this building make it impossible to ignore its claims for consideration in a paper dealing with these earliest of our Saxon churches; but the presence of other details consistent with a later date make it equally impossible to decide absolutely in its favour.

SUMMARY.

Such, then, are the characteristics of these buildings, and it only remains to sum up the evidence they give.

Here we have a group of churches, all on sites historically connected with the time of Augustine and his immediate successors, and all on just such sites as would naturally be chosen under the circumstances, as

being either centres of population or at any rate rich in building material other than wood. They are not only like each other in plan, but they have common features which no other building in England has, with the two exceptions before mentioned, both of which date from the end of the seventh century. They show none of the well-known details of later Saxon work, long and short, double splays, rib work, balusters, and so forth, but clearly belong to an earlier and simpler age, when Roman tradition was everything, and a locally developed style a thing of the future. Their plan is an adaptation of the small rectangular building with an apse at one end which became common in the fourth century, and of which the basilica of Junius Bassus in Rome is a typical example. When this is applied to a larger building, the size of the arch in front of the apse creates problems which have to be solved—first, the increased thrust, secondly, the increased height of the arch, whose crown must be kept below the flat ceiling, or at any rate below the level of the tie beams of the roof. These difficulties are got over in a way which suggests the inexperienced and timid builder—not by accepting the difficulty and providing for it, but by avoiding it. In place of one arch three are built, with of course less height and less thrust. In St. Pancras's, indeed, this development seems to be in the experimental stage, for when the triple division had been made, the builders were, as it appears, not satisfied with its stability, and to further buttress the central arch walled up the side openings almost immediately after their erection. And this might be taken as evidence that the triple arcade is an invention of the time, and the first step towards a native style. We should, perhaps, expect to find its prototype in Gaul, or even in Rome, but so far I have not been able to find any parallel sufficiently close to be given here.

Another special and remarkable detail is the use of buttresses, hitherto considered to be a definitely non-Saxon feature. They occur at St. Martin's, St. Pancras's, and Ythanchester, and also in the nearly contemporary Reculver. The complete examples at St. Martin's and Ythanchester have sloping heads of brick in horizontal courses, and St. Pancras's had the same, if the illus-

trations of 1722 and 1755 are to be trusted. They are of one projection throughout their height, as much as 2 feet at Ythanchester, and about 14 inches in the other three examples.

The only two doorways which remain to their full height have flat heads, though the outer opening of the west porch at St. Pancras's and the west doorway at South Elmham were arched. As far as the evidence goes, there were no external north or south doorways; all were in the west wall, and probably all opened into a west porch, the nucleus of the later west tower.

The lateral chapels or *porticus* are another special feature, and contain no doubt the germ of the transept of later times. Some of them at any rate were built as places of burial, and whether they had altars at first does not appear. Evidences of them exist at St. Martin's, St. Pancras's, and I think Ythanchester, and there are records of them at Rochester, Lyminge, St. Augustine's, Canterbury, and elsewhere, all with reference to burials.

Walls are thin, those at St. Pancras's and Lyminge being of the regulation Roman thickness of 1 foot 10 inches; but as thin walls were built throughout Saxon times, no stress can be laid on this point. Floors are of plaster, wherever traces of them remain.

Of windows there are naturally few examples remaining. All agree in having a single splay from inside to outside, but otherwise are not much like each other, except in being closely related to Roman work. The masonry details of those in the west wall of the nave at St. Martin's are like those of the undoubtedly Roman windows in the Pharos at Dover; and the wide openings at Ythanchester, though the great rarity of Roman windows in England makes it impossible to give a parallel to them from this country, have many prototypes in Roman churches, whose wide window-openings are filled with the pierced slabs called *transennae*. The same may be said of their flat heads, though the idea of having the windows as near the top of the wall as possible no doubt was a factor here in the discarding of an arch; for in the west wall, where the gable end gave

height and to spare, the window over the western opening has the arched head.

From all this it will, I think, appear that these buildings are just such as would naturally be built at the date which is on so many grounds claimed for them—full of details borrowed from Roman work, the only architectural tradition of the time, but having distinctively non-Roman features. The nave of St. Martin's, Canterbury, has, both from Bede's writings and from the details of its west windows and the pink plaster on its walls, been claimed as actually of Roman date; but I

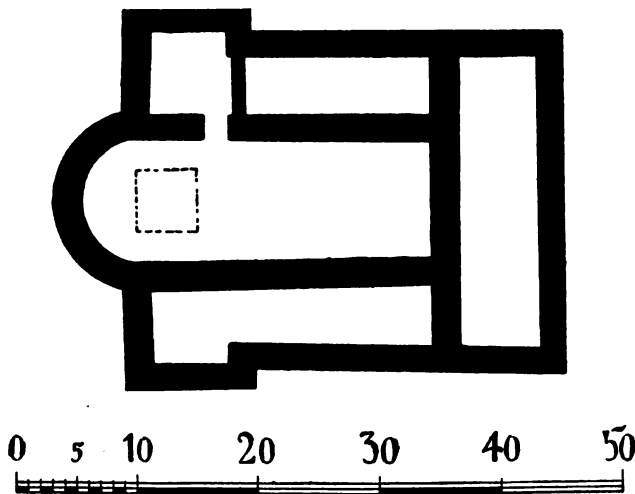


FIG. 7.—SILCHESTER.

must here confine myself to giving a few objections to the Roman theory shortly:—First, that if so, the chancel, being undoubtedly earlier, must also be Roman, and with it the church of St. Pancras, which it too closely resembles to be many years apart in date, and which is in plan and arrangement unlike any known Roman building; second, that it is not good enough for true Roman work, but is just what a non-Roman imitator might build; thirdly, that Ythanchester gives a parallel to its buttresses with brick heads, and the proportions of its nave are very much those of Rochester, South Elmham, and

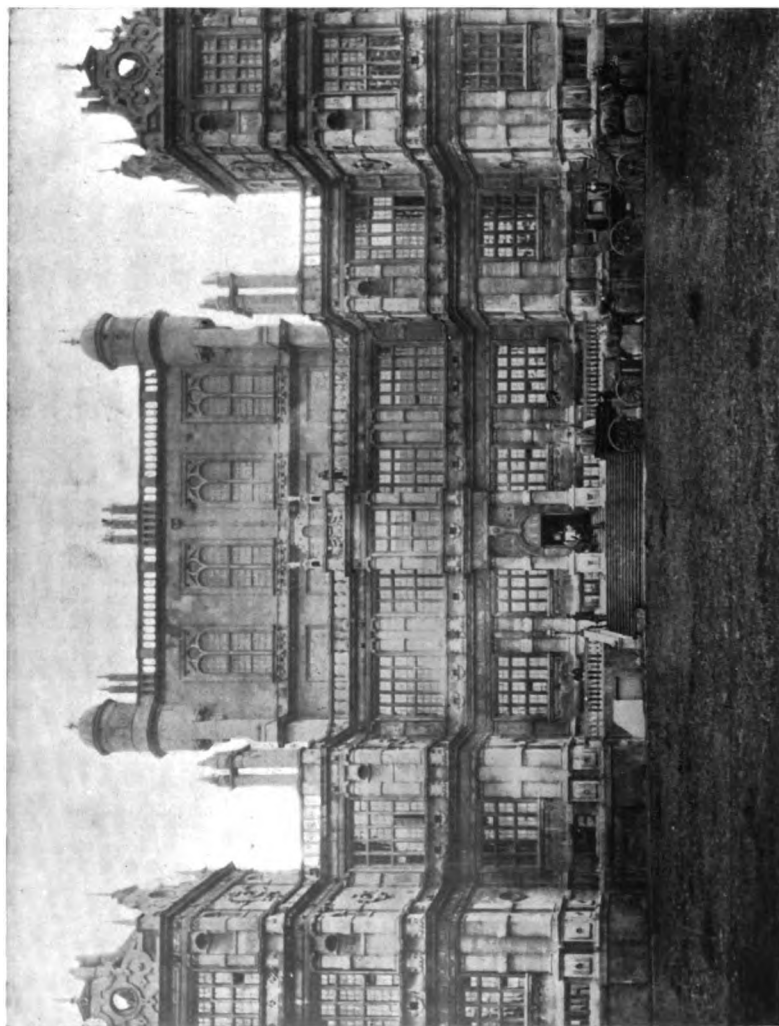
St. Pancras's; and fourthly, that its close resemblance to Roman detail in the two respects before mentioned tells no more for than against the argument; for Reculver, built in 670, showed lacing courses of brick as regular as any Roman work, and a floor of *opus signinum* throughout.

We have only one possible instance remaining of a Roman Christian church, namely, the little basilica of Silchester, whose plan, Fig. 7, in no way resembles that of St. Pancras's or St. Martin's. The first cathedral of Canterbury on the present site, as described by Eadmer, may have been a Roman building, and certainly in Bede's time the idea that Roman Christian churches had been reconsecrated and used by Augustine and his followers was strong. There would be a charm, too, in the thought of a tangible connection between the earlier and later Christianity, which might count for something. Compare for this Bede's *Life of St. Vedast*, where it is recorded that the saint when sent on a mission to Arras made it his first business to discover and reconsecrate the abandoned church of the Roman Christians.

For the present, I think the churches of the St. Pancras type may be arranged thus:—

- | | |
|-------------|------------------------------------|
| Before 600. | St. Martin's, Canterbury, chancel. |
| „ „ | St. Pancras's, Canterbury. |
| 604. | Rochester. |
| 633. | Lyminge. |
| ? 650. | St. Martin's, Canterbury, nave. |
| 653. | Ythanchester. |
| ? 670. | South Elmham. |

It only remains to me to make some small acknowledgment of the invaluable help given me during the writing of this paper by Mr. Micklethwaite and Mr. Hope, by the free use of all their notes and plans of these buildings and everything connected with them; and in particular I must thank Mr. Micklethwaite for coming with me to Ythanchester last autumn, and Mr. Hope for his timely notice of the excavations at St. Pancras's, which enabled me to see all his discoveries there in their first freshness.



WOLLATON HALL. FRONT ELEVATION, 1901.

WOLLATON AND HARDWICK HALLS.

By J. A. GOTCH, F.S.A.

WOLLATON HALL.¹

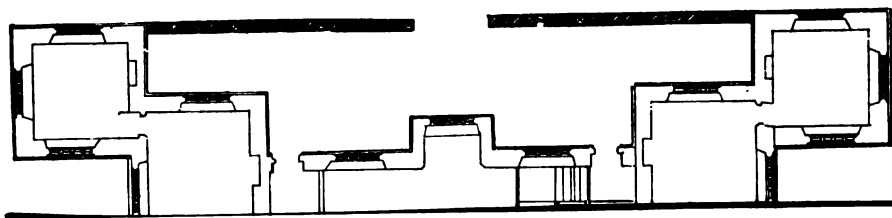
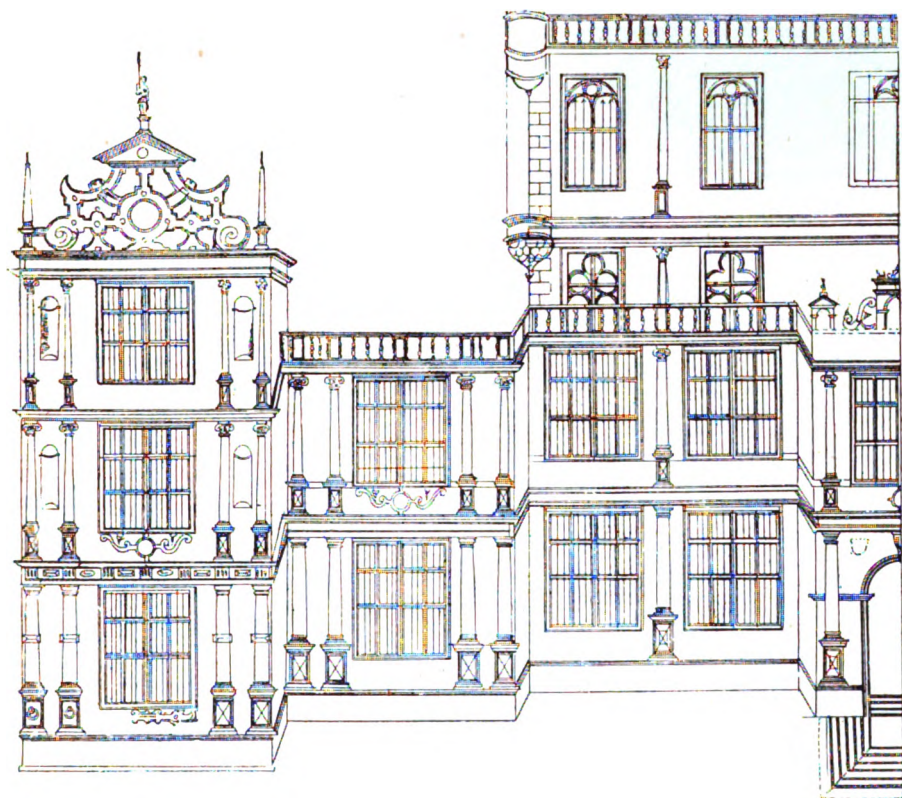
Wollaton Hall is sometimes quoted as a typical example of the work of the English Renaissance. Those who are in sympathy with that phase of domestic architecture point to it as a magnificent specimen of an Elizabethan palace. Those who are out of sympathy direct the finger of scorn to its extravagances and its pretentiousness. As a matter of fact it cannot be called a typical example. In its chief characteristics it stands by itself, namely, in its lofty central hall and its four corner pavilions. In its extreme regularity of treatment, and in the great care bestowed upon its detail, it exhibits far more of conscious effort in design than the majority of houses built at that period.

The interesting question is, Who was responsible for the design of Wollaton? So little is really known from actual records of the architectural designers of that period, or of their method of work, that the field of conjecture is a vast one, and offers scope for manœuvres on a large scale. But there are one or two facts connected with this house which help us to a certain extent. We know from the inscription over the garden door that it was built by Sir Francis Willoughby, constructed with uncommon art and left as a precious possession to the Willoughbys. It was begun in 1580 and finished in 1588. We also know that in John Thorpe's collection of drawings in the Soane Museum there is a ground plan of the house and half the front elevation. We also find in Wollaton Church a monument to "Mr. Robert Smythson, gent. architector and surveyor unto the most worthy house of Wollaton and diverse others of great

¹ Read at Wollaton, July 25th, 1901.

account," who died in 1614 at the age of seventy-nine. Lastly, we learn from Cassandra Willoughby, Duchess of Chandos, who wrote an account of the house in 1702, that Sir Francis Willoughby sent for the master-workmen who built the house out of Italy, and also for most of the stone figures which adorn it.

Here, then, we have apparently a number of conflicting claims. No one, however, contests with Sir Francis Willoughby the honour of having built the house in the sense of having ordered and paid for it. Nor is its date in question. But there are three claimants to the honour of having designed it, namely, John Thorpe, Robert Smythson, and the master-workmen out of Italy. First, as to the latter. The idea has long been very prevalent that the houses of Elizabeth's time owed their special characteristics to Italy and to Italian workmen; and so, in a way, they did, because Italy influenced more or less directly the work of the Renaissance in all other countries. But, as a matter of fact, it is extremely difficult to trace anything but a very small amount of English work to actual Italian hands. The whole tendency of recent inquiries goes to show that it was English hands which executed most of the work which has an Italian appearance. The tales of models having been sent for from Italy for English houses are, I think, apocryphal, because the plan of an English house differed widely from that of an Italian; and although I am not prepared to say that Cassandra the Duchess was wrong, still the master-workmen who were sent for out of Italy could have had very little to do with the designing of Wollaton. The chief credit for that performance I am inclined to give to John Thorpe, and I reconcile his claims and those of Robert Smythson by regarding the latter as the chief workman and clerk of the works or surveyor. It must be remembered that although the same terms are used now as were used then, the meaning of them has changed. We find a number of men described as "architectus" or "architector," who were what we should regard as master-masons, and that is what I think Mr. Robert Smythson was. But it must also be remembered that the relation of the master-mason to the architect was then very different from what it is to-day. The architect



to-day designs everything himself; in those days he seems only to have given a general idea of what he wanted, leaving the detail to be developed by the master-mason. The latter might therefore well take credit to himself—or his sorrowing family for him—as being the “architector” to a house like Wollaton.

The actual origin of the idea of the house I attribute to Thorpe. He claims nothing for himself; he only leaves certain drawings behind him (Plate II).

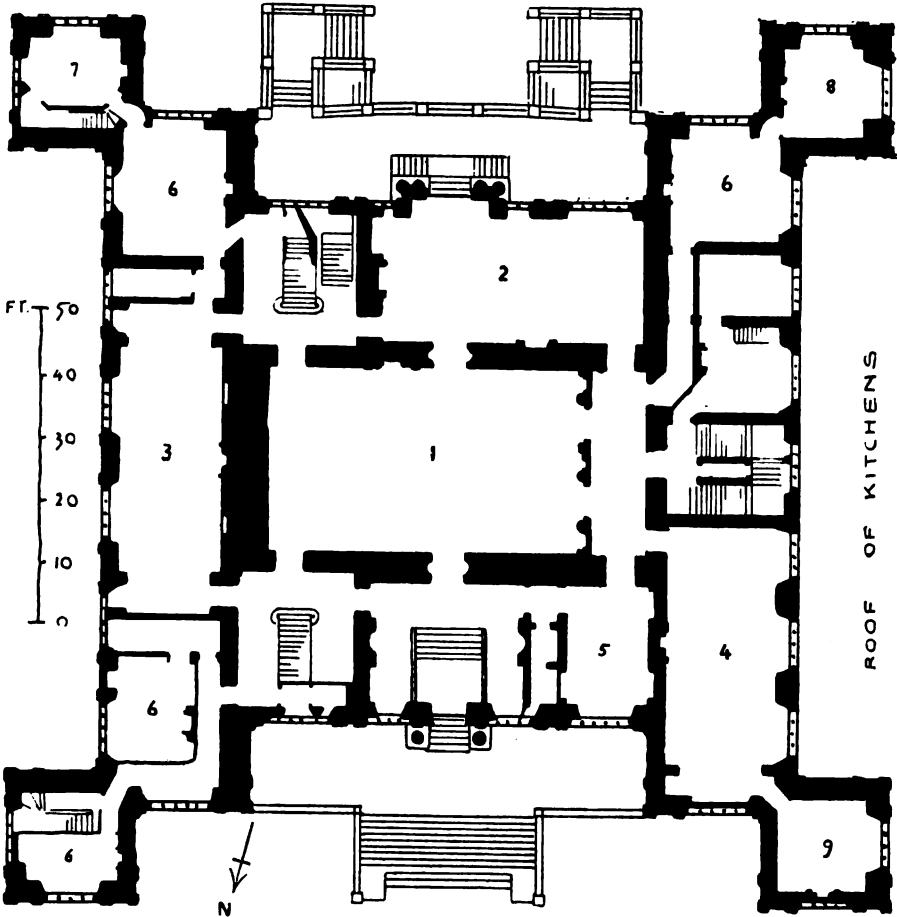
In comparing Thorpe's plan with the actual ground plan (Plate III), it will be found that the main dimensions tally almost exactly; the corner pavilions, however, are not quite so large as he shows them, and the projection of the wings beyond the entrance and garden fronts is rather larger than he indicates. The hall is built to his dimensions of 60 feet by 30 feet. As to the general similarity of the two plans, the likeness is obvious, but the difference in the thickness of the various main walls should be observed. The variations in the positions of the internal cross walls need hardly be considered, because they result in all probability from comparatively recent alterations. But in the main skeleton there are several noteworthy discrepancies. The corner pavilions in Thorpe's plan do not overlap the north and south fronts, whereas they do in the building itself. The entrance porch as built is quite different from what he shows, and so is the projecting window in the centre of the south or garden front. The two central bays which he shows on the east and west fronts do not appear in the building itself: as a matter of fact the east front has six large windows between the pavilions, whereas the west has seven. Thorpe shows both these fronts treated alike.

Comparing Thorpe's half-elevation with the photograph of the building (Plate I), the general likeness again is obvious. But Thorpe shows no basement windows; his front porch agrees with his plan and differs from the actual work; he shows two four-light windows in the front at the side of the porch, whereas there are actually a four-light and a five-light; he shows a single pilaster between these windows, whereas there are two. The end of his wing has a four-light window; the

building itself has a five-light. Niches which he does not show have been made on the main front as well as on the flanks of the various projections. He shows several ways of ornamenting the pedestals of his pilasters; in execution they have the gondola rings shown to the left of his ground story. The curly gable of his corner pavilion, although carefully shown, does not quite tally with the gable as carried out; nor does his angle turret on the central tower agree with what was built. He evidently started by treating the angle with quoins surmounted by a small turret at the top, but he subsequently lengthened the turret downwards. The pilasters which he shows on this central block do not appear in the building: if they had they would have served to bring that part of the composition more into harmony with the lower part and nothing would probably have been heard of the suggestion that the central pavilion is part of an older building. A study of the plan and of the building, however, disposes of this suggestion, nor could the lofty hall and the room over it be harmonized with any known treatment of houses prior to the Elizabethan era.

The discrepancies here pointed out do away with the idea that Thorpe's drawings were made from the building after erection. They are easily accounted for on the supposition that the drawings were modified in the course of being carried out.

There is one point in connection with these drawings which bears forcibly upon the question with which we are now dealing, namely, the source whence the ideas which underlay our English Renaissance came. There was a tolerably widespread desire in Elizabeth's time to benefit by what was being done in foreign lands. A young architect, John Shute, was sent by the Duke of Northumberland to study architecture in Italy. Lord Burghley made more than one inquiry for books on architecture recently published in France, and John Thorpe himself, as his drawings show, studied Italian, French, and Dutch books. One of the French books to which he devoted considerable attention was Androuet du Cerceau's *Les plus Excellents Bastiments de France*, published in 1576, and in that book are



WOLLATON HALL. GROUND PLAN, 1901.

a few plans with corner pavilions such as these at Wollaton. The disposition of Wollaton is so unusual that it is quite possible that Thorpe may have put into practice here some of the ideas he gleaned from Du Cerceau's book. Some of Du Cerceau's plans he copied into his own MS. book, but in doing so he adapted them to English uses, and it was much the same with Wollaton. The plan is not a direct copy; it is only the general idea which, if I am right, was derived from the French source. Thorpe, having designed the plan and elevation, may be presumed to have handed them over to Robert Smythson, who, with the help of the master-workmen from Italy, carried the work out. Such a course of procedure would at any rate reconcile the claims of the various parties.

But leaving the question of who designed the house, a few words must be bestowed upon the structure itself. Its plan, although of foreign origin, was so contrived as to comply with old-established English habits. The central position of the hall rendered it not altogether easy of access in the usual way—that is, into the passage at the end called the “screens.” The most direct way from the front door to the hall is that which now exists, but this leads you into the middle of the side, not into the screens. Thorpe, therefore (for I will assume that Thorpe was the designer), kept his hall floor above the level of his front door, and led the visitor, not directly into the hall, but round to the right, and so, by way of a flight of steps, up to the end of the hall and delivered him into the screens in the usual way. The spare space not occupied by the stairs he devoted to the porter's rooms. A further reason for keeping the hall floor raised was that, contrary to the prevailing custom, he put his kitchen and servants' rooms down in a basement. This was almost a necessity of the design, for being of a pretentious nature, it was obliged to be grand on every side, and the kitchen and inferior premises had to be hidden away in a basement in order not to spoil the symmetry of the four show-sides of the house.

The disposition of the house, with a central hall surrounded by rooms two stories high, necessitated an unusual height for the hall, which is over 50 feet high.

Its window-sills also had to be above the roofs of the surrounding rooms, and they are some 35 feet from floor. The upper floor of these adjacent rooms on the east side was devoted to the long gallery, but modern alterations, necessitated by constant use, have not only divided this up into a number of small rooms, but have effectually obliterated from the interior of the whole house all its Elizabethan character, except what remains in the basement and in the great hall. The fine stone screen remains here, and also the original roof, which is an excellent specimen of Elizabethan work. It has this peculiarity, that though fashioned like an open hammer-beam roof, it supports in reality the floor of a large room over, called the Prospect-Room, which occupies the upper part of the central block that forms so conspicuous a feature of the house.

It only remains to say that the house was entirely new from its foundations and that it occupied eight years in erection: there was apparently no building here before it, although very frequently we find Elizabethan houses enveloping remains of a humbler predecessor. The Willoughbys had lived at Wollaton for some generations previous to the building of the mansion, but their home was a house somewhere near the church. It has been suggested that the central block is earlier in date than that which surrounds it; but reflection shows that the hall must necessarily have been built in relation to the lower buildings round it, there is nothing to indicate any alterations of an older building, the detail of the central block, although different, is contemporary with that of the rest of the house, and the whole of it is shown on Thorpe's drawing. Everything, therefore, tends to prove that the whole house was built at the same time. Duchess Cassandra tells us that the stone was brought from Ancaster, and that the same pack-horses which brought it took back Sir Francis's coal in exchange. Notwithstanding that he got his stone for nothing, she says, and that labour was much cheaper in those days, the house cost Sir Francis £80,000.

The external treatment is of pronounced classic character, with plenty of pilasters and bold cornices. There are a number of circular niches containing busts

of classic personages such as Virgil, Plato, Aristotle, and Diana. The master-workmen out of Italy were presumably familiar with these celebrities, and so might have been Mr. Robert Smythson, gent., but the ordinary English workman must have been rather puzzled by them, and perhaps secretly relieved when he heard that a shipload of them had gone down, an accident that is said to account for some of the niches being empty. But, *pace* Duchess Cassandra, a good deal more assistance in English houses came from the Dutch than the Italians in the time of Elizabeth, and it would not be surprising if the building accounts, which are some day to be published, showed that Holland rather than Italy was the source whence some of the lower work was derived (in spite of the gondola rings which adorn the bases of some of the pilasters), as it certainly was the place where the curly gables of the pavilions had their origin.

HARDWICK HALL.¹

Hardwick Hall is a building of considerable interest to the student of English domestic architecture, inasmuch as it is a good example of one manner of the Elizabethan designers, and it has undergone no very serious alterations since it was built. It has suffered, like most houses of that time, from age and from the changing fashions of its inhabitants; but such changes as it has experienced have been in comparatively small matters, so that in the general disposition of its plan and in its external appearance it remains to-day very much the same as when the eye of its founder, Bess of Hardwick, last fell upon it. This Bess of Hardwick was a notable personage, a woman of great ability and strong will, and being possessed of considerable wealth, she left her mark upon the times in the shape of several large houses, of which this is one, and the only one surviving the others being Chatsworth—which has been rebuilt—

¹ Read at Hardwick, July 26th. 1901.

and Oldcotes. She was the daughter of John Hardwick of Hardwick, and was born in the old hall, the ruins of which still remain in front of the present house, near the brow of the hill. That she was a woman of great ability and personal attractions is sufficiently proved by the fact that she married four husbands and survived the last. Her first husband was Robert Barley of Barley. Her second was Sir William Cavendish of Chatsworth, ancestor of the present Duke of Devonshire, the owner of Hardwick. The third was Sir William St. Loe, and her fourth was George, Earl of Shrewsbury. It was after her marriage to the last-named that she built Hardwick Hall, since her initials, E.S., and a coronet form a conspicuous part of the ornamental balustrade on the towers. The date usually assigned to the house is 1576. There is a chimney-piece in one of the bedrooms dated 1588, another in the dining-room dated 1597, and the door of the room called after Mary Queen of Scots is dated 1599.

The new hall and the old hall stood side by side, and both were in use for many years. The old hall is, indeed, not much older than the new. Much of it has disappeared, but judging by what remains, its general disposition was symmetrical; its windows, as can be seen, are mullioned and have rectangular lights; its whole appearance points to a date about the middle of the sixteenth century. Tradition gives this house as the birthplace of Bess in 1520, and perhaps a careful search might reveal indications of a building of that date. But if anything of it still survives, it certainly would seem as though the old house had been modernized during the second half of the sixteenth century, an additional proof being the remains of a plaster frieze with figures modelled in relief, of the same character as the frieze in the presence-chamber of the new house. Having been thus brought up to date, the old house was not left to immediate decay in consequence of the erection of its rival, for we learn from the ingenious Mr. Collins, who quotes Bishop Kennet's *Memoirs of the Cavendish Family*, in his account of the Dukes of Devonshire given in his *Peerage*, that one room was of such exact proportions and such convenient lights that

it had been thought fit for a pattern for a room in Blenheim House. It would be, therefore, well into the eighteenth century before the old house fell to ruin.

It is not unlikely that the older house was the more comfortable of the two; for Hardwick Hall can hardly be considered as a model of convenient planning. It belongs to that species of house of which a large number were built in Elizabeth's days—a house designed as an exercise in symmetry rather than as a dwelling. True, it contains the apartments which were then considered essential, but they are arranged with less than the usual care to secure comfort and convenience. What must strike everyone who first sees Hardwick is the great size and number of the windows. This has given rise to the well-known jingle, "Hardwick Hall, more glass than wall." It is a fault common to many of the houses of the time and one which Lord Bacon protested against in his oft-quoted complaint that "you shall sometimes have fair houses so full of glass that one cannot tell where to become to be out of the sun or cold." The fact that windows were so large and plentiful is one of considerable interest and significance, for it emphasizes the complete change which had come over house-planning in the space of a few years. Thirty or forty years earlier windows were somewhat jealously introduced, especially on outer walls, for the necessity for defensive precautions had then hardly ceased. Here, at Hardwick, however, no thought of defence is apparent; everything is done to procure the largest amount of light and air. The windows, in fact, are overdone; they make the circuit of the walls with relentless symmetry, and not a few of them have been blocked up inside, in order to render the rooms habitable. Some of them were shams from the outset, and have fireplaces against them, whilst others are crossed by floors, so that the lower lights belong to one story and the upper to another. That is what comes from trying to carry out a preconceived idea—namely, that of absolute symmetry—instead of making the convenience of the house the first consideration.

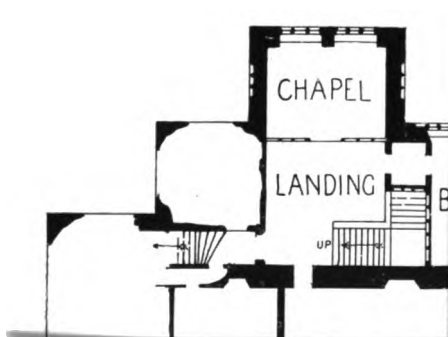
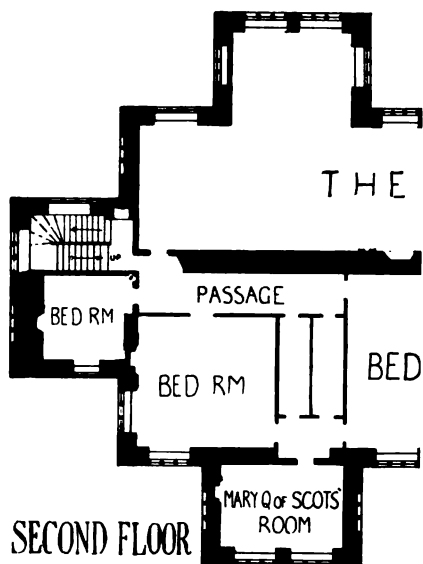
The room called after Mary Queen of Scots, which is situated high up on the second floor, in one of the pro-

jecting turrets, has three of its sides on the exterior filled with windows ; on the inside, however, only one side is lighted, the fireplace occupying the second side and the bed the third. The room is called after Mary and has the arms of Scotland over the door, but there is no record of the exact length of her residence in semi-captivity in this house. She was for seventeen years under the care of the Earl of Shrewsbury and Elizabeth his wife, and towards the end of that time her attractions bade fair to rival those of the redoubtable Bess herself, so that, according to old Fuller, when Queen Elizabeth inquired of the Countess how her guest did, that lady replied, "Madam, she cannot do ill while she is with my husband, and I begin to grow jealous, they are so great together." Fuller adds that in consequence of this intimation Elizabeth, who disliked anything approaching to a friendship between Mary and so great a peer, gave her into the custody of others. Mary was beheaded in 1587, and as the door of her room is dated 1599, the probability is that it was adorned in her memory, evidently not for her own proper delectation.

But leaving the gossip of history, let us look a little more closely into the architectural character of the building. Attention has already been called to the symmetrical character of the plan. The house consists of a large oblong with two projecting turrets on each of the long faces, and one on each of the short faces. The door, as usual, is in the middle of one of the long sides, but the hall into which it gives access is not disposed in the fashion which had been customary up to this period, and which still prevailed in most Elizabethan houses. That fashion is followed in the halls of colleges. It placed the hall lengthways with the building. At the entrance end a strip was cut off by a screen and became a passage called the "screens." The front door was at one end of this passage, the doors of the hall were in one side of it, and the doors to the buttery and kitchen department were in the other. The hall was lighted by windows along the sides, and at the opposite end from the screen was the dais with its bay-window, and beyond this end were the family rooms.

At Hardwick the hall, instead of being placed length-

To face page 444.



ways with the building, goes across it from side to side ; instead of being lighted down the sides, it is lighted at the ends ; the front door, instead of being in the end of the " screens," is in the middle of one side of them ; while at the ends were the doors to the servants' department, and also the buttery hatch—all of which are now built up. This unusual disposition may not seem of much importance, and it may be said that although the hall lies differently in relation to the house, yet all the usual features are there—the screens, the buttery hatch, and so forth. But the difference of arrangement nevertheless is indicative of a momentous change, and one which distinguishes mediaeval houses from modern. Up to Elizabeth's time, and even James I., the hall was the centre of the family life ; it lay between the family rooms and those devoted to the servants. The daïs end, with its bay-window, was reserved for the family, and there they dined. Adjacent to this end were the parlour and the staircase leading to the bedrooms and other principal chambers. But already the custom of dining in the hall was falling into desuetude ; the family sought smaller and more private rooms. With their withdrawal the character of the hall changed, and it tended to become no longer a living-room, but an entrance-hall or vestibule for passing traffic. This alteration of character became thoroughly established in the time of Inigo Jones, and has remained to the present day. One of the tests of the age of a house is the disposition of its hall. In mediaeval times it was a living-room ; in modern times it is a vestibule. The hall at Hardwick, owing to its plan, is leaving the mediaeval type and approaching the modern. It may have had a daïs, but probably not. Even if it had, that end had not the snug feeling of the old-fashioned arrangement, with its bay-window and the fireplace fairly close to the seats of the chief personages. It must have been somewhat uncomfortable, as on each side of that end is a passage leading to a principal staircase. I have said " staircase," but, indeed, Hardwick may be said to have no staircase ; it has instead long flights of steps. By " staircase " is meant a special feature, either of wood or stone, such as is the pride of most Elizabethan houses. There were very few stone

staircases in English houses of this period. Burghley House has, so far as I know, the only good example. But there are hundreds of splendid wooden staircases, and in a house of the pretensions of Hardwick one would have expected to find a particularly fine specimen. But throughout the house the detail is disappointing; everything is large and coarse, including chimney-pieces and doorways. It is rather in its general disposition and the size of its rooms that Hardwick is interesting, for when one comes to examine the work closely there is an absence of that fancy and fertility of design which distinguishes the better class of work of that period. But although the means of getting upstairs are not very interesting, there are some fine rooms to go to. There seem to be no family rooms on the ground floor, unless they have been turned from their original purpose. All the principal apartments are on the upper floors, and as each story is unusually lofty the whole height of the building is much greater than was commonly the case. The hall itself is two stories high, and the only access from one half of the house to the other on the first floor lies across the gallery over the screens. The principal rooms on this floor are those now called the dining and drawing-rooms. In addition to these there are a few bedrooms and various small apartments contrived to meet modern requirements. The finest apartments, however, are on the second or top floor, where are the presence-chamber and library and the long gallery, besides a fine bedroom and the room named after Mary Queen of Scots. Above these rooms and partly in the roof are a number of subsidiary bedrooms. The presence-chamber is a large and lofty room with a very deep frieze of modelled and coloured plaster work, representing hunting scenes. The quality of the work is not very high compared with what was being done in Italy and France at the same time; but it has considerable vigour, and imparts a fine and stately character to the room. Over the chimney-piece in the library adjoining is an alabaster panel of very considerable merit, representing Apollo and the Muses. The long gallery occupies the whole length of the east side of the house and is a lofty and handsome room. It is the only apartment which retains its original ceiling,

and as the ceilings of Elizabethan houses exhibited some of the most original and attractive work of the period, Hardwick suffers much from their absence. This particular ceiling, however, has no special claim to admiration ; it is one of the plainest and least interesting with which I am acquainted. In this respect it is only in keeping with the rest of the detail of the house. The long gallery was one of the characteristic features of an Elizabethan house. The longer the better, designers of the day used to think, and although this is of considerable length, being 166 feet long, there were several houses in which the gallery was longer still, reaching to as much as 200 and 250 feet. The rigid symmetry of the external treatment has already been referred to. It is as complete in its way as that of Wollaton, but the latter house derived more than symmetry from the classic proclivities of the day. It also obtained the pilasters and niches with which its walls are adorned. Hardwick has none of these and is an example of the fact that they were by no means a necessary, although they were a very constant ingredient in the design of the period. The treatment of the windows here resembles in some degree that employed at Wollaton, or rather, one should say, Wollaton followed Hardwick to a certain extent. In both places there is a projecting moulding or architrave, which makes a framework round the window and rests at the bottom upon a projecting sill, which is supported by small brackets. The mouldings of the jambs, mullions, and transomes, however, differ in the two examples. The cornices which divide the various floors have only a general resemblance, and the balustrade which crowns the walls is as meagre in the one house as the other. The finish of the turrets here is not so ambitious as at Wollaton, as instead of an elaborate curly gable, there are only the Countess's initials and coronet supported by a Dutch flourish, a humble member of the same family which is so conspicuous on the towers at Wollaton. There are at Hardwick valuable accessory features which are now wanting at Wollaton, as well as at most of the houses of that time which have come down to us, viz. the garden walls and lodge. The lodge was almost as much a part of an Elizabethan home as the great hall and long

gallery, but being of small size and detached from the main building, it has in the majority of cases been swept away in favour of some kind of landscape-garden effect. Happily it has escaped in this instance, and remains, together with its supporting walls, as an example not only of the manner of laying out the approach to an Elizabethan house, but also of the quaint and sometimes unworkmanlike way in which artificers treated their materials. In looking at the lay-out of Hardwick, the visitor must beware of confusing the original arrangement with the excellent garden laid out by Lady Louisa Egerton, on the south side, which, by the lapse of time, has assumed an appearance admirably in keeping with the house. In conclusion, I desire to leave the domain of architecture for an instant to call attention to the great amount and excellent preservation of the tapestry which clothes the walls and vividly illustrates this method of decorating them, and also to the interesting furniture which survives in considerable quantity. These two things reconcile one to the absence of fascinating architectural detail, and help to make Hardwick one of the fine examples of a large Elizabethan house.

The Royal Archaeological Institute of Great Britain and Ireland.

CASH ACCOUNT FOR THE YEAR ENDED 31st DECEMBER, 1900.

Dr.

C. 7.

[illegible]

We hereby certify that we have prepared the above Cash Account for the year ended 31st December, 1900, and that the same agrees with the Cash and Bankers' Pass Books of the Institute. Further, we have examined the payments made during the period with the Vouchers produced, and find the same in order.

H. MILLS BRANFORD & Co., *Chartered Accountants.*
3, Broad Street Buildings,
London, E.C., 14th May, 1901.

Examined and found correct,

ED. H. GODDARD } *Hon.*
A. RIDLEY BAX } *Auditors.*

**Proceedings at Meetings of the Royal Archaeological
Institute.**

ANNUAL MEETING AT NOTTINGHAM.

July 23rd to July 30th.

President of the Meeting.—The Right Hon. Lord Hawkesbury,
F.S.A.

Vice-Presidents of the Meeting.—E. W. Brabrook, Esq., C.B.,
F.S.A.; Robert Evans, Esq., J.P.; the Rev. James Gow,
M.A., Litt.D.; J. T. Micklethwaite, Esq., V.P.S.A.

Director.—E. Green, Esq., F.S.A.

Local Secretary.—G. Harry Wallis, Esq., F.S.A.

Meeting Secretary.—C. R. Peers, Esq., M.A., F.S.A.

Tuesday, July 23rd.

The proceedings of the Meeting began at noon, with a reception by the Mayor (Mr. F. R. Radford) in the Council Chamber of the Exchange.

The MAYOR said that he had much pleasure in welcoming the Institute to Nottingham. Nottingham men were proud of their city and its associations, not only for its historical importance in ancient times, but also for its growth and prosperity at the present day. They could claim many distinguished names as natives of their city and its neighbourhood—Cranmer, who was born and lived a few miles away, Ireton and Whalley, two of Cromwell's generals, while the family of Cromwell himself came from a Nottinghamshire village, Lord Byron, Darwin, Earl Howe, William Lee, inventor of the stocking frame, and many more. Though many of the ancient features of Nottingham had vanished, they did their best to preserve in the city every relic of past times, and he hoped that the visit of the Institute would help them in their endeavours, by increasing among Nottinghamshire men an interest in their local antiquities.

LORD HAWKESBURY, having taken the chair, delivered the Presidential address.

It gave him great pleasure, he said, to attend the meeting. He could assure them that he felt highly flattered when the desire was expressed that he should preside on this occasion. Though there were many Nottinghamshire men who would have performed the duties better than he could hope to do, there was no one who more readily seconded the welcome the Mayor had given the Institute on their visit to Nottingham and his (the speaker's) native county. Nottinghamshire was rich in archaeological treasures, and there was plenty of food for the historian. They in this county had the advantage of a county historian—an advantage few other counties had. Dr. Thoroton's work was a valuable one, but there yet

remained much to be done in this direction. Dr. Thoroton was a South Nottinghamshire man, and in his days, as now, "the silver Trent (as Shakespeare said of another part of the river's course) came cranking in," and divided the county almost into two, south Nottinghamshire going very much with Leicestershire, and the north with south Yorkshire and the neighbouring county of Derbyshire. Could they wonder, then, that Dr. Thoroton did not know so much of the northern part of the county as he did of the villages around his own home? Recently a local society had been founded in Nottingham, and by the unanimous wish of its first members it had been named after Dr. Thoroton. He believed this society, which he hoped without vanity he might look upon in a sense as a child of his own, was doing, and would continue to do, good work in recording the history of the county. Fortunately a good deal had been done in regard to parish registers by Dr. Marshall, who had transcribed and published quite a number of them. Nottinghamshire was rich in the number of its monastic houses, and though in many cases not much remained, a great deal of interest attached to them all. They were chiefly situated in the north of the county and on the borders of the Forest, the merry greenwood probably proving an attraction, as it had done since, for residential purposes. For the benefit of those members who were in Nottingham for the first time he would enumerate them. There were 39 of them, including the smaller houses, colleges, hospitals, and cells, 13 being houses of importance. Five were Augustinian, namely, Felley (founded in 1156), Newstead (1170), Shelford Priory (founded in the reign of Henry II.), Thurgarton (1130), and Worksop (1102-3); two Benedictine: Blyth (1088), and Wallingwells (founded in the time of Stephen); one Carthusian: Beauvale (1338); one Cistercian: Rufford Abbey (founded by the Earl of Lincoln in 1143 for monks brought from Rievaulx); one Cluniac: Lenton Priory (founded by William Peverell at the beginning of Henry I.'s reign); one Gilbertine: Mattersey (before 1192); two Premonstratensian: Brodholme (founded in Stephen's reign), and Welbeck Abbey (1153). Of smaller houses there were the following:—Bingham, Bradebusk (Gonalston), Clifton, Fiskerton-on-Trent, Marshe, Newark, Nottingham (eight houses), Rodington, Sibthorpe, Southwell, Stoke-by-Newark, and Tuxford.

In conclusion he expressed the hope that the Institute would spend a very pleasant and profitable week.

The PRESIDENT OF THE INSTITUTE, Sir Henry Howorth, in proposing a vote of thanks to the Mayor for his reception of the members of the Institute, said that they were delighted to come to this, one of the most famous of English towns, which for more than a thousand years had been not merely a prosperous English county town, but had taken part in almost every turn of English history. They were hoping to have a very enjoyable week, and to collect for future publication a great deal of valuable matter in the course of their excursions and evening meetings. He had been asked to call their attention to the exhibition of the city maces and plate, lent by the courtesy of the Mayor and Corporation, as were also the early deeds and charters which they saw before them. Special mention should be made of one most interesting exhibit, the only known example of

a York gradual, most kindly lent by Mr. James Ward, and they were also indebted to Mr. George Fellows for several valuable manuscripts.

Mr. E. W. BEABROOK having seconded the vote of thanks, it was carried unanimously, and suitably acknowledged by the Mayor.

Judge BAYLIS then proposed, and Mr. J. T. MICKLETHWAITE seconded, a vote of thanks to Lord Hawkesbury for presiding at the meeting. The resolution was put to the meeting by Sir Henry Howorth and carried, and the proceedings terminated.

After luncheon at the "George" Hotel, the headquarters for the week, the members walked to St. Mary's church, where Mr. W. STEVENSON gave an account of the building and its history as follows:

The early history of this church, like many other institutions of this ancient city, is lost in the mists of time. In Edward the Confessor's time, and unquestionably long before, it was a wealthy foundation endowed with land and houses in the demesne of the King. In the later days of William the Conqueror the rectory was in the holding of Aitard the priest, when the church and all its belongings were recorded in Domesday as being worth one hundred shillings. There is no doubt but in early times it ministered to the adjoining manors of the castle and Sneinton, which combined formed the central wapentake of the county.

The fact of the town being chosen as the metropolis of a county stamps it as a place of early importance, one in which this church could not fail to have a full share. With the Norman Conquest came a change of ownership—this lordship of the old English Kings became the lordship of a Norman vassal, William Peverell, who founded the alien priory of Lenton, a mile or so to the west of the town, and as part of its endowment gave this church, by consent of Henry I., with its lands, tithes, and appurtenances. The current of its history was here turned, and for fully four hundred years this church, with the churches and chapels in the adjoining manors, was in the "dead hands" of the prior and convent. This, the richest, they took to themselves, and reduced the rectory to a vicarage.

The earliest vicar I am able to refer to is Johannes de Ely, in 1290, but it was a vicarage before 1234. The last of the long line of Priors of Lenton, patrons and rectors of this church, was Nicholas Heth, who, with his brethren, was hanged on the gallows of Nottingham in 1538 for the part they had played in the great revolt of the north called "the Pilgrimage of Grace." The priory, with all its property, escheated to King Henry VIII. His daughter, Elizabeth, sold the patronage and the rectorial property into lay hands, since which the tithes have been commuted into real estate. So ends the story of the financial reverses of this ancient church. The town, from being the seat of a castle, suffered in the troubled times of King Stephen and Henry II. It was burnt and pillaged in 1140, when it is recorded that the churches were burnt along with a great number of the inhabitants who had taken refuge therein. There are some deep caves in the rock under the church, partly accessible to-day. It was again burnt in 1153, and a third time in 1174.

We have evidence of an arcaded church in stone being built about 1175, and the rebuilding of an arcaded portion of it about a century later, in the existence of some late Norman capitals found in the

foundations of the church some years ago, and the remains of an Early English column, which you may see in the base of one of the piers of the north arcade. These early churches are further represented in the top course of the foundations of the present nave and transept walls. This course, which forms a seat on the inner side of the walls, is capped with Norman and Early English incised coffin slabs, the designs of which may be largely recovered. We are wholly without documentary evidence with regard to the date of the erection of the present church.

John Leland, the antiquary, was in this church in 1540, and the following appears in his *Itinerary*:—"The church of St. Mary is excellent new and uniform in work, and so many fair windows in it that no artificer can imagine to set more." You will notice that the capitals at the springing of the arches, such prominent features during the Norman, Early English, and Decorated periods, show signs of decadence. You will also notice that the arch-moulds in part are continuous, uninterrupted by an impost, down the columns.

The church, except the restored portions, is built of local stone, identical with that furnished by the old quarries in the Town Wood at Gedling, a neighbouring village. It is a sandstone of the saline beds of the New Red Sandstone, which in this part of England reposes upon the Upper Bunter Sandstone, or pebble beds, which constitute the rock of Nottingham. As a building stone it is not quarried in the county at the present time.

A controversy had long existed with regard to the chancel, the details of which, though evidently by the same architect, were very poor. Some advance the opinion that it is later than the west part of the church. I submit that they overlook the fact that the body of the church would be erected by the munificence of the country gentry and the princely merchants of the town, whereas the erection of the chancel would be dependent upon the patron and rector, the Prior of Lenton. I do not think I am far wrong in laying the poverty of the chancel at the door of the Prior of Lenton. You will notice there are no sedilia, piscina, aumbry, credence, or Easter sepulchre in the church.

Our knowledge of the chantries in this church is limited; that of William de Amys, a great merchant of the town, was founded in the former church. The northern bay of the north transept is held to have been its chapel in the present church. We have no evidence that connects any chantries with the south transept.

Inserted in the south wall of the chancel is a fragment of sculpture in alabaster. The subject is a pope consecrating a bishop. It was found beneath the floor of the church some years ago, and is no doubt a portion of the original reredos. Nottingham was an important centre for sculptors in alabaster, and a large business was done all over the country; the stone could be readily obtained from Chellaston, Derbyshire, by boats down the Trent. Little can be said of the contents of the church. The iconoclasts of the last century destroyed the tombs spared by the fanatics of the Civil War, of which Nottingham was an important centre, and the church has passed through the fire of a number of "restorations," each in its turn being deemed an improvement.

The tomb in the south transept has a canopy of the same design as

the front of the south porch. The recumbent figure remains; but the altar tomb, with its inscription to John Salmon and Agnes his wife, recorded elsewhere as benefactors to this church, has gone. The tomb in the north wall of the north transept is a very beautiful piece of costly work. It is considered to be later than the church, and to be an insertion in the wall.

Here the altar tomb remains, securely fixed, with its beautifully sculptured alabaster front and ends and its massive marble top, which has been cut back about three inches to accommodate some former pews. Originally this slab was inlaid with a Flemish brass and bore the effigies of a civilian and his wife, but the brass had been removed before the first drawing of the tomb was made, soon after the Civil War. This tomb is practically proved to have been erected to the memory of Thomas Thurland, a merchant prince, and his wife, who resided at Thurland Hall in this parish and were buried in this church. He founded a county family, the last member of which came under the displeasure of Lord Cecil, the great minister of Queen Elizabeth, as a dangerous papist at the time of the Babington conspiracy.

Another beautiful but unknown altar tomb stood detached in the centre of the north transept. Its mutilated recumbent effigy is now in the north aisle, after enduring years of exposure in the churchyard and in the vicar's garden. It was specially noticed in its perfect state by Dr. Richard Pocock, Bishop of Meath, when he visited this church in May, 1751, and made a drawing of the remarkable headress of the figure.

The first and second Earls of Clare, who figured on the side of the King in the Civil War, are buried in the east side of the south transept. Their great tomb, placed north and south, with its urn and four obelisks, is gone, and the inscribed panels now fixed as tablets on the immediate east wall.

The chancel is the burial-place of the Right Hon. Chambre, Earl of Meath, 1715, and of the Hon. Margaret Middleton, a descendant of the great Sir Hugh Middleton; she lived on an annuity from the New River Company, and died in 1778, aged one hundred years.

The font bears an inscription in Greek, readable backwards and forwards, translated, "Wash away thy sin, wash not thy face only."

The west end of the church was entirely rebuilt in 1725, in the classic style. The arcades give evidence that the old front was leaning or falling westward. This endured to my time, and was taken down in the middle of the last century, and the present west end, as a restoration of the original one, dates from that period.

The vaulting of the tower is a construction designed by Mr. Stretton, a local architect, and carried out in lath-and-plaster, about 1820.

I wish, in conclusion, to draw attention to a remarkable earthenware headstone that has stood near the north-west corner of this church for nearly two hundred years, and is as fresh and sharp in its lettering as on the day it was fixed. It has been made in two halves and pressed together. Horizontal lines were drawn across the surface, as on a school slate, and the block letters were rudely impressed in the face of the plastic body. It is possibly the work of

a potter of the old town, and is, I believe, the only example of the kind in England. The date is 1714.

Mr. MICKLETHWAITE said that the church was a fine specimen of a parish church of Henry VII.'s time, and was built about the year 1500.

St. Peter's Church was next visited, and here Mr. ROBERT EVANS acted as guide. In the course of his remarks he said:

It is to be regretted that there are so few records existing relating to this interesting church, one of the three churches of the three parishes of Nottingham. It is evident, from what can now be seen, that a much older building existed on this site. I refer chiefly to the south arcade, which is of thirteenth century work. Note the second pier from the west, which is a massive piece of masonry. From this point remains of a screen were found during the recent renewals of the floor; the remains were stumps of the main posts of the screen. The remaining piers of the south arcade are of characteristic detail and good proportions. Turning to the northern arcade, several changes have been made. The Early English work has disappeared, and some late fourteenth century work is substituted; this, again, has been mutilated by the erection of a gallery, extending over the whole of the north aisle and across the west end of the nave; it was removed in 1884. The clearstory windows are of a debased character, the former ones being traceried of fifteenth century date. The nave roof is a fine example of the period. It is said that the Strelleys, an old Derbyshire and Notts. family, were chiefly concerned in bearing the cost of this work, during the lifetime of Archbishop Kemp. Sir Robert Strelley married Isabella, a daughter of the house of Kemp. She died in March, 1488. The roof of the south aisle is of similar detail. Perhaps one of the most interesting discoveries recently made was the staircase to the rood loft. When some rather loose masonry was removed, some of the upper and lower steps were found intact. The intermediate steps have been supplied as now seen. To the left on the top landing is a large altar slab set up on end, having five incised crosses. In the tower there is a well constructed groined ceiling; over the opening in the centre is a covering on which is depicted the emblem of St. Peter, viz., the cross keys and the head of a pastoral staff. A few remains of mural decoration, chiefly lettering, are to be seen on the wall at the east end of the south aisle. Deering records that about 1739 a vault was being formed at the east end of the north aisle for the Smith family, when a stone coffin was found, and also an encaustic tile bearing the symbols of St. Peter and St. Paul. The bones found in this excavation were believed to be those of John de Plumtree, founder of the hospital bearing that name. The present chancel is, as will be seen, a modern restoration. The chancel of the old church was destroyed during the civil wars at the time when Colonel Hutchinson was Governor of Nottingham Castle. Another chancel was built soon after, the north and south walls projecting inwards and partly covering the piers of the great arch, and the ceiling coming nearly as low down as the pier caps; and when this building was removed the foundations of the original chancel were discovered and the present walls erected thereon. The Spiritual Court of the arch-deaconry was held up to a recent period at the western end of the

south aisle. This court was formerly held in the chapel of All Saints on the site of the present vestry. Of the tablets or monuments there is but little to be said. Amongst them will be found one to William Cressey, a judge of the King's Bench, Ireland, who died in 1645; one to William Ayscough, 1719, of whom Deering says that he first introduced printing into Nottingham in 1710. In the restoration of the floor of the church a few years ago many incised slabs were found covering vaults and graves. A careful plan of these was made, and a copy for reference now hangs in the vestry. The dates on the old bells were 1672, 1666, 1635, 1685. These bells have been recast since 1780. The sacramental plate is not very ancient, but quite worthy of inspection. This reminds me that about twenty-three years ago my late friend, George Freeth, informed me that he had seen a document by which, in May, 7 Ed. VI., John Colinson, then Mayor, Sir G. Clifton, and other King's Commissioners delivered "to Nicholas Cooke, parson of the parish church of St. Peter, Nottingham, and Thomas Goldrynge and Richard Burton, churchwardens, two chalices, one gilt, the other parcel gylte with two pattens for the same for the administration of the Holy Communion, and also five bells of one accord and a saint's bell all hanging in the steeple of the same church with a clock in the same, to be safely kept employed, unembesilled and unsold, until the King's majestie's pleasure." There are some interesting records of the Guild of St. Mary and St. George, date about 1440, chiefly accounts of the Guild; these can be seen in the vestry.

Leaving St. Peter's, a short walk up Houndsgate, passing the charming early eighteenth century buildings of Collins's Hospital, brought the members to the castle, where, on the upper terrace, close to the fine seventeenth century mansion of the Dukes of Newcastle, which was burnt in the riots of 1831, and now in its restored condition serves as the Art Gallery and Museum of the city, Mr. EMANUEL GREEN, F.S.A., gave an account of the history of the site and the buildings which formerly stood on it, down to their destruction in 1651. Mr. Green's paper is printed at p. 365. The day's work ended with a visit to the caves in the Hermitage grounds, by the kind permission of Mrs. Leavers, who also most hospitably provided tea for the members. The caves, of which there are many in Nottingham, are cut in an outlying spur of the soft local stone, which reaches its highest point in the castle rock. The stone weathers very badly, and the exposed parts of the caves are steadily worn away; engravings of comparatively recent date show how much has gone within the last fifty years. The Hermitage caves contain no features to which a precise date can be assigned; one of them has been a pigeon-house, and several have circular shafts in the roof, which have at some time been used as chimneys, but may originally have been entrances. Local traditions see churches, and ever monastic houses, in their remains.

In the evening a meeting was held in the Exchange Council Room, Dr. James Gow, headmaster of the Nottingham Grammar School, and headmaster elect of Westminster School, in the chair.

Mr. ARTHUR F. LEACH, M.A., F.S.A., gave an account of the ancient schools of Nottinghamshire, with special reference to those of Southwell, Newark, and Nottingham. He said that it was not now

necessary to argue against the prevalent idea that all schools began in the reign of Edward VI. Grammar schools were, of course, plentiful before that time, and their origin was the Church. There were grammar schools at Canterbury within fifty years of the coming of Augustine. Early schools were by no means necessarily connected with monasteries; there were plenty of monastic schools, but the monks did not care for the introduction of outsiders to their houses. The collegiate church at Southwell, being practically one of the four cathedrals of the archbishop of York, was by canon law obliged to keep a grammar school, and the official charged with the maintenance of the school was called a chancellor. Newark School was first mentioned in 1238, although it was usually considered to have been founded in 1530. Schoolmasters in early times seemed to have been chosen young; it was a very rare thing to find a man over thirty appointed to a school. The method of teaching was not in the direction of "sparing the rod," but on the other hand parents sometimes complained of the number of "remedies," *i.e.* holidays, allowed. The ordinary pay of a grammar school master was £10. Southwell School was not abolished by Edward VI., as it had previously surrendered to Henry VIII., and had been by him re-established on his own foundation. Newark School was enriched and enlarged by an additional income of £42 in 1530, which was to be devoted to the maintenance of two honest secular priests, the one to teach grammar, the other plainsong, pricksong and descant. The earliest reference to Nottingham Grammar School was in 1382. In 1401 the head-master, Robert Fole, sued a parent for payment of school fees at the rate of eightpence per quarter. Mr. Leach concluded with a reference to the meaning of the term "free" as applied to schools, giving it as his opinion that a free school was obviously one in which no fees were charged.

A paper by the Rev. Canon RAVEN, D.D., F.S.A., on "The Church Bells of Nottinghamshire," was taken as read, owing to the lateness of the hour. It will be printed in the *Journal*.

Wednesday, July 24th.

A special train started at 9.30 for Southwell, which was reached at 10 o'clock, and a short walk uphill brought the members to the ruined building on the south side of the Minster, known as the Episcopal Palace, but more correctly the Manor House of the Archbishops of York. In the fifteenth century hall on the first floor the Rev. R. F. SMITH gave an account of the building and its restoration by the late Bishop Trollope. Enough remains to show that the Manor House consisted of a quadrangular court with buildings on all four sides, having turrets projecting from the outer walls on the east and south. There seems to be no work earlier than the fifteenth century. At the north-east angle are the ruins of the chapel, its eastern gable retaining part of a traceried window. There are some remains of the great hall, to the south of the building now known as the hall, and formerly in all probability the great chamber.

The Minster was next visited, under the guidance of the Rev. G. M. LIVETT, who first led the party to the west of the church. He

said there would perhaps be a difference of opinion as to what the effect of the restoration of the spires on the western towers might be from an æsthetic point of view. These towers were placed in a normal position for a Norman church, although not the only position, and they became more ornate as the eye ascended. There ought to be no windows in the lower stage, and those that were there were not even a restoration, but an insertion without any authority whatever. Two beautiful windows were inserted in that position in the fourteenth century, that on the north being removed early in the last century when it was thought the towers were coming to grief. The other window was removed between the years 1840 and 1850, and at that time the custodians of this noble fabric thought they would like to put in Norman windows to imitate those on the other side. A peculiar difference in the arcading was pointed out in the topmost stage but one. After going round the outside of the church, and noting among other things the twelfth century detail re-used to make out the string course broken into by the fifteenth century north aisle windows, the alterations of design in the late thirteenth century work at the west of the chapter-house, the traces of the original east gable, the remains of the twelfth century south transept apse, and the site of Booth's chapel, destroyed in 1847, the members entered the nave by the west doorway, and Mr. Livett gave a concise account of the history of the church and the constitution of the chapter. On reaching the north transept, Mr. J. T. MICKLETHWAITE called attention to the remarkable alabaster effigy of Archbishop Sandys, who died in 1588. In spite of the fact that he was a Puritan of the severest type, he appears on his tomb, formerly in the presbytery, with cassock, girded albe, a chasuble with very long train behind, which must have been carried by an attendant, and a doctor's hood over all.

Mr. PEERS remarked on a roughly cut baluster shaft, of Saxon date, standing in the north-west corner of the transept, and pointed out that the carved lintel over the doorway of the stair close by was in all probability a twelfth century tympanum re-used. After a visit to the well-known chapter house, Mr. Livett concluded an admirable and lucid account with some remarks on the choir and presbytery, and a discussion arose as to the eastern termination of the twelfth century church. This is generally assumed to have been square, but Mr. HAROLD BRAKSPEAR contended that the evidence upon which this conclusion is based would equally apply to a sleeper wall to take the gable, and that traces of an apse might be found to the east of this wall if looked for.

After lunch at the "Saracen's Head," carriages started in a steady downpour of rain which lasted for the rest of the day, and drove to Thurgarton Priory, where the Rev. J. STANDISH, and after him Mr. HOPE, gave an account of the history and remaining buildings. The priory was founded about 1130 by Roger Deincourt for Augustinian canons, but nothing earlier than the thirteenth century remains. To this date belongs what is left of the church, namely, the three western bays of the nave and the northern of two western towers, as well as the subvault of the western range of the conventual buildings, now covered by the palace of the Bishop of Southwell, built in 1777. The church was repaired in 1854, when



**CALVERTON CHURCH, NOTTS. REPRESENTATIONS OF JANUARY,
FEBRUARY, AND AUGUST.**

the present north aisle was added and the chancel rebuilt with a certain amount of old work. The sedilia are three old stalls from the monastic choir, and the altar slab is ancient. By the kind permission of the Bishop of Southwell, the members were enabled to see the remains of the western range, now forming cellars to the palace, after which the drive was continued to Nottingham.

At the evening meeting, Mr. E. W. Brabrook being in the chair, the Rev. A. D. Hill read the following paper on "Some Ancient Carved Stones in Calverton Church, Notts":

The church of St. Wilfred, Calverton, appears to have been entirely rebuilt in the thirteenth or fourteenth century out of old material, and consists of a chancel, a nave of the somewhat unusual form of a wide parallelogram 42 feet 8 inches long and 37 feet 2 inches wide, of one span and with no traces of any arcades, and a western tower forming the only entrance to the church.

The chancel arch is not in the centre of the east wall of the nave, but about 5 feet nearer to the north side. It is a plain thirteenth century arch of two chamfered orders, but it rests on older jambs of Norman work with triple-grouped shafts, the easternmost shaft forming a respond imbedded in the chancel wall. The width between the jambs is 14 feet 4 inches, which with the non-central position of the arch seems to suggest that it has been widened northwards.

The abacus is square, with a hollow chamfer beneath. The long capitals are irregularly fluted and ornamented with volutes, between which on the north side there is a small square panel with incised sculpture which I shall describe fully hereafter.

The walls of the nave have been refaced externally above the lower courses and finished off with a battlemented parapet at a late period; and no doorways or windows remain of the older work, excepting a Norman double roll moulded arch rebuilt inside one of the belfry windows, as the church received its final embellishment of a complete set of round-headed windows in 1763. A porch, organ chamber and mullioned windows were added to the nave in 1881 and 1889.

In the chancel walls and lower courses of the nave the worked surface of Norman stones is to be seen, and a number of stones with incised patterns of the older work have been re-used in various places.

Of these re-used stones the most interesting are to be found high up in the third stage of the tower, imbedded as a horizontal course in the inner face of the west wall, and bearing representations of the various occupations of the months of the year.

Despised by the re-builders, one at least of the masons at work upon the church felt a tender regard for these old carved stones, for he has built into his work, where few would see and none would injure them, eight of the pictured representations which perhaps had served to instruct his dull wit and inspire his strong right hand in the old church of his boyhood. Seven of these stones are *voussoir*-shaped, and must have formed part of a band of ornament 9 inches wide on the architrave of an arch with a radius of about 5 feet to their outer edge. The eighth stone has parallel sides, and may have formed part of a vertical continuation of the same band down the jambs of the arch. A ninth stone, also rectangular, is to be seen near the ground in the outer north side of the tower. Each panel has its own border, and a semi-circular arch of the above dimensions would

give room for the twelve months with interspaces which may have borne the signs of the zodiac, as in the Norman porch of St. Margaret's, York, in which, I may add, there is evidence of a thirteenth month, according to the Saxon calendar in common use at that period.

Similar representations are to be found upon three sides of a stone font at Burnham Deepdale in Norfolk, *Archæologia*, X (1792), at St. Evroult, Montfort; and also upon a leaden font at Brookland, Kent, described in *Arch. Jour.*, VI (1849), and again beautifully illustrated in an article on leaden fonts by Dr. Fryer in Vol. LVII (1900). The whole subject of mediæval representations of the months and seasons has been exhaustively treated by Mr. James Fowler in *Archæologia*, XLIV.

The Calverton stones afford but an incomplete series of the months, but the resemblance to the smaller figures on the fonts is so remarkable that there can be little doubt that they are of the same period and may probably be referred to some common origin such as the Anglo-Saxon calendars. This resemblance enables us to identify the subjects before us.

No. 1, January, is represented by a man seated at a trestle table which groans beneath the good cheer of a boar's head and a goose on flat round dishes, a loaf, and a flagon curiously inadequate to replenish the enormous drinking horn which the feaster holds in his right hand. His left arm rests on the table, and the hand holds a knife. His hawk, which I take to be an indication of rank, stands on the edge of the table. (Plate I.)

No. 2, February, chill and raw, is humorously illustrated by a man in a hooded cloak and sleeved tunic, seated on a low chair with scroll back and arms, and stretching out his left hand and heavily booted feet to the warmth of a crackling fire kindled out-of-doors beneath a tree, evidently an evergreen. His favourite bird is also enjoying the blaze regardless of the danger to his feathers. (Plate I.)

No. 3.—Here is a man engaged in pruning a tree or vine with a large knife. At Brookland this subject is allotted to March, and at Burnham to April. In these agricultural subjects we no doubt see the Saxon labourers of the country at work.

No. 4.—This is a man holding in both hands an implement which may be a hoe or a crook stick, which he seems to be using among growing crops. At first this was supposed to represent ploughing, but on cleaning away some mortar the upright portion appeared to represent a plant. In the Burnham figure for June we have a man engaged in weeding with two sticks, the one in the left hand having a crook, an operation which is seen again, among thistles, in fifteenth century stained glass in the Mayor's parlour at Leicester.

No. 5, August, is represented by a man stripped to the waist reaping corn with a sickle. A neatly banded sheaf stands upright behind him. We may notice the broad-brimmed hat, similar to those worn in the summer months of July and August by mower and reaper on the Brookland font. (Plate I.)

Nos. 6 and 7.—These two stones, each containing a separate panel, seem nevertheless to belong to a single month, September, and represent two men threshing corn with flails.

No. 8.—This is a larger rectangular stone 9 inches by 13 inches which does not fit into the series of months and which I suggest may



[From photo, by Mr. Loughton, Southwell.

CALVERTON CHURCH, NOTTS. CAPITAL OF RESPOND, CHANCEL ARCH.

have belonged to the vertical band on the jamb. It is divided into two panels by a horizontal line. The upper compartment shows a knight on horseback holding the reins in one hand and stretching out the other with his hawk on it. A similar subject is taken for May in the Brookland series, while in the Anglo-Saxon calendar figured in Strutt's *Manners and Customs* (Vol. I, Pl. X, XII) hawking is attributed to October. The lower compartment represents a dog, the body like a greyhound, with a long tufted tail and a large head. It has a hare or rabbit in its mouth.

No. 9.—This stone, being in the outer face of the wall, is so much weather-worn that its subject is nearly indistinguishable. It is about 9 inches by 10 inches and probably belonged, like the last, to the jamb. Two figures facing each other with outstretched arms appear to be raising something between them, which might, however, be a third figure at a higher level. It may represent the Ascension of our Lord, though it hardly seems to me to be intended for a religious subject. It bears a certain amount of resemblance to a small tablet inserted twice above the arcading in the Brookland font, said by Dr. Fryer to represent the Resurrection.

While these ancient carvings have passed an obscure existence in the tower for the last 600 years, there is another within the church which was long regarded as an object of special veneration, until the kindly veil of whitewash came to preserve it, forgotten but uninjured, to the present time. The Rev. W. T. Smith, vicar of Calverton, to whose courtesy and interest in these ancient features of his church I owe much of this paper, discovered it in 1874 on removing the whitewash from the capital of the north pier of the chancel arch. (Plate II.)

The sculpture consists of a small panel about 3 inches by 4 inches containing a three-quarter length figure of a bearded bishop, seated, as shown by the folds of drapery over the knees, wearing a mitre, short and broad, and holding a pastoral staff, surmounted by a cross, in his left hand, while the right hand is raised with three fingers extended in benediction. On his left is a small naked figure, standing, with crossed arms, representing a recently baptized convert.

The capital has been partly cut away close to the edge of the panel for the insertion of a support to a rood beam, in such a way as to avoid injury to the panel and to leave it quite visible from the nave.

I am told that an old description of Calverton Church states that on the north pier is a small inlet tablet traditionally said to be a contemporary portrait of St. Wilfred. Also that in a fifteenth century will a special bequest was made to the church in its honour, references which I have not yet been able to verify.

The little figure of the baptized convert may suggest that the bishop is Paulinus, whose numerous baptisms in the neighbouring Trent are well known; but tradition is the best guide, and I have no doubt that St. Wilfred is intended, the great church builder but stormy prelate in whose name this church is dedicated, and who was consecrated Bishop of York in 664, and died Bishop of Hexham in 709. This little effigy has thus been the means of preserving not only his memory but an actual portion of the stately Norman church which bore his name.

Mr. W. H. ST. JOHN HOPE read a paper on "Alabaster," dealing with its early working in England, with special reference to the great school of "kervers" at Nottingham. He said that there existed several well defined groups of effigies which appeared to radiate from a common centre, for example the series of knightly figures with orles round the bascinet, which were to be connected with the work of Thomas Prentys and Robert Sutton of Chellaston, "kervers," who made the Green tomb at Lowick, Northants, in 1419, and the same craftsmen were probably the makers of the Arundel tomb at Arundel and that of Henry IV. and his Queen at Canterbury. He thought that for the present it might be assumed that the majority of the early alabaster monuments in the country were worked at Chellaston, in Derbyshire, the site of the principal mediaeval alabaster quarries, but that the smaller statues and panels were the work of the "alabaster men" of Nottingham and York. Their works were well known, not only in their native land, but also on the continent. A class of alabaster carvings which could with great probability be attributed to Nottingham workmen were the St. John's Heads, several examples of which were exhibited in illustration of the paper, one of them, kindly lent by the Curator of the Leicester Museum, being in its original painted oak case. Other specimens of alabaster work were shown, including three fine figures found on the site of Flawford Church, whose history was given as follows¹:

In the year 1779, whilst workmen were employed in taking up the chancel floor, three very fine effigies were discovered hidden beneath the pavement. These effigies, which had doubtless been concealed by some pious Churchmen at the time of the Reformation, or more probably at an even later period, to save them from the fanatical zeal of the local iconoclasts, were in a good state of preservation. One of them represents St. Peter, the patron saint of Flawford Church, with his right hand raised in the act of benediction and holding in his left hand the model of a cruciform church. Upon his head is a triple crown, and over his right arm hang the two keys. At his right side kneels a small figure, from the mouth of which a label originally proceeded, but this has been broken off. The small figure holds in its hands the model of a church, and was probably intended for the founder of the church, who is thus represented as committing the edifice to the care of St. Peter. The figure of St. Peter measures about 2 feet 8 inches in height, and has evidently been richly coloured and gilded. Another of the effigies represents the Virgin Mary, with a crown upon her head, and with the infant Saviour in her arms. This was the first of the three which was discovered and was unfortunately slightly mutilated by the workmen. This figure measures about 2 feet 4 inches in height. The third effigy represents a bishop in full episcopal vestments, with a mitre upon his head and a pastoral staff in his left hand, his right hand being raised in benediction. This is the largest of the three, measuring 3 feet 2 inches in height. It has been conjectured by some to represent either St. Paulinus, St. John of Beverley, or St. William of York, and by others to have been St. Thomas a'Becket; but as the vestments appear to be those of a

¹ From the *Reliquary*, July, 1874.

bishop rather than an archbishop (the pall being absent) it is more probable that it was intended for Robert Martell, Bishop of Dunblane, though it is difficult to understand why this effigy should have been more conspicuous than those of the Virgin and Child or of St. Peter, the patron saint of the church. The spot where these effigies were discovered was immediately beneath the place where the altar had stood.

As an illustration of the extent of the alabaster industry, a photograph was shown of a fine and well preserved reredos of fifteenth century English work, now in a church in Iceland. It contained seven panels of the Passion and Resurrection, framed in the original woodwork.

Thursday, July 25th.

This was a thoroughly wet day from start to finish, but in spite of the weather a full muster started in brakes from the "George" Hotel at 9.15. Wollaton Hall was the first item on the programme, and the members were received with the utmost kindness by Lord and Lady Middleton, who threw open for their inspection the whole of the house and grounds. After a preliminary tour through the various rooms, in which Lady Middleton herself most kindly acted as guide, a halt was made in the great hall, and Mr. J. A. GOTCH, F.S.A., read a paper on the house and its history, which is printed at p. 435.

The annexed list of the fine collection of pictures, and of the armorial shields on the roof of the great hall, has been kindly drawn up by Lord Hawkesbury, as a memorial of the visit of the Institute.

CATALOGUE OF THE PICTURES AT WOLLATON HALL, NOTTS., AS
REARRANGED BY THE PRESENT LORD AND LADY MIDDLETON.

GREAT HALL.

North Side. Upper Row.

1. A Herdsman and his Flock. By Rosa di Tivoli.
2. An Italian Kitchen. By Rosa di Tivoli.
3. Horses and Cattle. By Rosa di Tivoli.

Under Row.

1. Lions Disputing Possession of a Deer. By Rubens.

N.B.—This picture was at Middleton and went with Lady Middleton, widow of the fourth Lord, to Shipley.

2. Sir Francis Willoughby, first Baronet. By Sir Peter Lely.
3. Cassandra Willoughby, sister of the first Baronet and of the first Lord Middleton and who married her first cousin the Duke of Chandos as his second wife. Sir Peter Lely (school of).
4. Hunting a Wild Boar. By Snyders.

East End. Upper Row.

1. Neptune and Venus. By Luca Giordano.
2. Jupiter and Europa. By Luca Giordano.

Under Row.

1. Sir Hugh Willoughby, the Arctic Navigator.
2. Market Scene, Fruit, Fish, etc., and a Lady. By Sibrechts.
3. Sir Richard Willoughby, Knight, 28 years Lord Chief Justice *temp.* Edward III.

South Side. Upper Row.

1. A Pastoral Scene, Sheep, etc. By Rosa di Tivoli.
2. Hunting the Wolf. By Snyders.
3. A Pastoral Scene, Shepherds and Cattle. By Rosa di Tivoli.

N.B.—These three pictures were purchased by Henry, fifth Lord Middleton, from Mr. Harrison of Walworth for £500. They were supposed to have been brought from Italy by Mr. Jennings, who had the title of Count de Walworth. Mr. Jennings sold Walworth to Mr. Stevenson, from whom Mr. Harrison bought it. The pictures were in the drawing-room.

Under Row.

1. Hunting a Wild Boar. By Snyders.
2. Portrait of Sir Francis Willoughby, Knight, who built Wollaton Hall, 1580–88. Over the fireplace.
3. Wollaton House, painted in 1695. By Sibrechts.

West End.

1. Hunting a Wild Boar. By A. Hondius (?).
2. Hunting a Bear. By A. Hondius (?).

On Easels at West End.

1. Henry, fifth Lord Middleton, painted in Italy by L. G. Blanchet, Rome, 1754.
2. A Boy in Blue (*temp.* George II.), supposed to be a Pierrepont, bought in Nottingham by Lord and Lady Middleton, May, 1889.

SALOON.

N.B.—Besides the pictures there are various sketches and engravings in this room.

East End.

Over the door leading to the staircase.

1. Elizabeth, wife of Sir Francis Willoughby, Knight, who built Wollaton, and daughter of Sir J. Littleton, of Frankley. By Zuccherro.
2. Henrietta Maria, Queen of King Charles I. On small panel near the fireplace. By Van Dyck.
3. King Charles I. on horseback. By Van Dyck.

Over the recess near the little window.

4. Sir Francis Willoughby, Knight, the builder of Wollaton. By Zuccherro.

N.B.—Sir Francis died in London and was buried in St. Giles's Church Without Cripplegate.

Underneath in the above-mentioned recess are sixteen small chalk or pastel drawings of family portraits.

Top row :—

1. An Old Lady.
2. Letitia, Lady Wendy of Wendy.
3. A Man unknown.
4. A Lady unknown.
5. Sir Francis Willoughby, builder of Wollaton.
6. An Old Lady.
7. Sir Percival Willoughby.
8. Bridget, wife of Sir Percival Willoughby.
9. Sir Christopher Willoughby (?), Lord Chief Justice *temp.* Henry VIII.
10. Lady Cassandra Ridgeway, daughter of Thomas, first Earl of Loudonderry, and wife of Sir F. Willoughby.
11. Man in red unknown.
12. Elizabeth Littleton, wife of Sir Francis Willoughby, the builder of Wollaton.
13. Letitia, Lady Wendy (?).
14. Sir Francis Willoughby the Naturalist's father.
15. Child unknown.¹
16. Boy unknown.¹

South Wall.

1. Small landscape.
2. Boy in red with a Dog (a young prince of Bavaria).

West End.

1. Letitia Willoughby, Lady Wendy.
2. King William III. By Sir Peter Lely.
3. Thomas, fourth Lord Middleton, full length, standing in his coronation robes and an embroidered coat and waistcoat underneath (all still at Wollaton). By Romney.
4. Henry Willoughby, son of Sir Percival and Bridget Willoughby.
5. Queen Mary II., wife of William III. By Sir Peter Lely.

North Wall.

1. Sir Percival Willoughby (over door leading into the passage under the gallery). By C. Jansen.

In the background of this picture is a ship with a Latin motto signifying "Lost by words, not winds or waves," which

¹ These two children are thought to be the two sons of Francis Willoughby the Naturalist.

is supposed to refer to his having been ruined by lawsuits, contesting the unjust will of his father-in-law, Sir Francis Willoughby, who built Wollaton, and who lived just one year too long, re-marrying in his dotage a young wife, who prevailed on him to make a will leaving her the greatest part of his Nottinghamshire estates, and from some extraordinary circumstances attending his death it was universally believed that he was poisoned.

2. Thomas, first Lord Middleton, full length, standing, in his coronation robes and crimson velvet coat and breeches, which are still at Wollaton in a chest in the Prospect-Room. By Sir G. Kneller.
3. Elizabeth, wife of the first Lord Middleton, and eldest daughter and coheirress of Sir Richard Rothwell, of Stapleford and Ewerby, Lincolnshire, Bt., full length. By Sir G. Kneller.

Below is a silhouette of Georgiana Chadwick, wife of Thomas, fourth Lord Middleton, who afterwards married Edward Miller Mundy, of Shipley, and by him was mother of the Duchess of Newcastle, wife of the fourth Duke.

4. Bridget, eldest daughter and coheirress of Sir Francis Willoughby, the builder of Wollaton, and wife of Sir Percival Willoughby, which marriage united the houses of Eresby and Wollaton. By C. Jansen.
5. Francis, second Lord Middleton, full length, standing, in coronation robes and an embroidered coat and waistcoat underneath, which are still at Wollaton. By Sir Joshua Reynolds.

DINING-ROOM.

East Side.

1. Hon. Rothwell Willoughby.
2. Francis, third Lord Middleton. By Sir J. Reynolds.
3. Sir Thomas Wendy.
4. A Lady in a Fish Market. By Palamedes.
5. Wollaton. View from Lenton Gate. By Sibrechts.
6. Thought to be Sir Francis Willoughby.
7. Francis Willoughby the Naturalist.
8. Hon. Robert Ridgeway, infant brother of Lady Cassandra.
9. Captain Sir Nisbet Josiah Willoughby, C.B.H., R.N. (over the fireplace). By Barber of Nottingham.
10. Lady Wendy.
11. Man unknown.
12. Lady unknown.
13. Man unknown.
14. Lady unknown.
15. Henry, fifth Lord Middleton (over door).

South End.

16. Sir Francis Willoughby.
17. Man unknown (not a Willoughby).
18. Middleton Hall, Warwickshire.
19. Lady Cassandra Willoughby (in black), wife of Sir Francis Willoughby and daughter of the Earl of Londonderry.
20. A Boy unknown, thought to be brother to No. 12.

West Side.

21. Henry, sixth Lord Middleton. By Barber of Nottingham.
22. A Party saying Grace. By Heemskeerk.
23. Digby, seventh Lord Middleton. By Barber of Nottingham.
24. Lady unknown.

North End. Alcove.

25. Fruit with a Bullfinch.
26. Dead Game, Lobsters, etc. By Snyders.
27. Alchemist. By Teniers.
28. Fruit with a Monkey and Parrot.
29. Fruit market.

LIBRARY.

North End.

1. A Lady in blue, unknown.
2. Landscape.

East Side.

3. Lord Strafford.
4. Man unknown.

West Side.

5. Lady in black, unknown.
- 6 to 12. Seven other pictures not family portraits.
13. Mrs. Winstanley (in pink).

SOUTH STAIRCASE.

1. The Park.
2. Boys eating Hasty Pudding. By Sibrechts, after Murillo (?).
3. View of the River Trent. By Sibrechts.
4. Henry, fifth Lord Middleton, his wife and three children.
5. Sea piece (over door at top).
6. Two Park-keepers at Wollaton. By Barber.
7. Sea piece (over door at top of stairs).
8. Henry, sixth Lord Middleton, in coronation robes. By Barber, after Romney.
9. Lord Howe's Victory, 1st June.
10. Old Lady in grey. An early Kneller.

In the DRAWING-ROOM, one picture. By Franz Floris (?).

NORTH STAIRCASE.

The Ceiling.

Prometheus stealing fire from Heaven in presence of the gods and goddesses, who express their amazement at his sacrilege. By Verrio.

On the left side is Minerva, on the right, Prometheus is accompanied by the nymphs and a sylvan god with the Vulture—Jupiter.

The painting on this staircase was done in the minority of the son of Francis Willoughby the Naturalist, and it is supposed that the painter was Verrio. The two boys attending the sacrifice represent the portraits of the Naturalist's two sons.

It was restored by Henry, sixth Lord Middleton, at a cost of £300. Mr. Reinagle, R.A., was the artist employed.

ENTRANCE HALL.

1. Achilles discovered in a female dress at the court of Lycomedes by Ulysses. Said to be by Rubens.
 2. A Scripture piece. By Rubens (?).
- These two were bought at a sale in Dublin in 1833.

Twelve pictures in a small bedroom, three in another bedroom, and one (a portrait of a man unknown) in a dressing-room near the north-east corner of the house.

COATS-OF-ARMS ON THE CORBELS SUPPORTING THE ROOF OF THE GREAT HALL AT WOLLATON.

East End.

1. Willoughby of Wollaton, *or* on two bars *gules* three water bougets *argent* two and one.
2. Freville, *or* a cross patonce *gules*.
3. Marmion, *vair* a fesse *gules* fretty *or*.
4. Kilpeck, *sable* a sword *argent* (elsewhere blazoned *gules* a sword *argent* hilted and pommelled *or*).
5. Montfort, bendy of ten *or* and *azure*.
6. De la Plaunche, *argent* billetée *sable* a lion rampant of the same.
7. Haversham, *azure* a fesse between six crosses crosslet *argent*.
8. Buttetort, *or* a saltire *sable*.
9. Bandy of ten *or* and *azure* a canton *ermine*.
10. Quarterly *or* and *gules* a bend *gules*.
11. Somerey, *or* two lions passant *azure*.
12. Zouche, *gules* ten bezants 4, 3, 2, 1.
13. Fillioll, *vair* on a canton *gules* a cross patonce *or* (or moline ?).
14. Brewes, *azure* crusily and a lion rampant *or*.
15. *Argent* three fountains *or* and *azure* two and one.
16. Field, *azure* a fesse *or* between three eagles displayed *argent*.

Over the entrance door on the north side are two shields bearing the arms and quarterings of the builder of Wollaton and his wife Elizabeth Littleton, of which engravings are given in Thoroton. On the south front is an inscription giving the date of the building of the house.

On the chairs in the hall are the arms of Sir Henry Willoughby of Wollaton (father of the builder), with thirteen quarterings impaling Grey, quarterly of eight.

The following memoranda are written on the first page of an old book of homilies (*The Works of Joseph Hall, Bishop of Exeter* 1628):—

“Lettice Willughby borne att Middelton the Seaventh day of March, on the yeare of our Lord God 1627 . about five of the clocke in the afternoone.”

“Katherine Willughby borne att Middelton the forth of November, In the yeare of our Lord God . 1630 . about Six of the clocke at night.”

“Cap^{tn} Francis Willughby was borne att Middelton, on Sunday, about six of the clocke in the morning beeing the twoo and twentith of November, Anno Domini, 1635.”

In a Prayer Book dated 1642, on the inner side of the cover is written:—

“Emma Willughby.”

And opposite is written:—

“francis Willughby
Borne in the yellow
chamber at Middleton
Hall between two and
three of the clocke
on Sunday morning the
thirteenth day of September
Anno Domini 1668.”

“Cassandra Willughby borne at Middleton in the chamber over the Kitchen the twenty seaventh day of Aprill thr: quart^r past nine of the clocke in the forenoone on Wednesday Anno Domini 1670.”

“Thomas Willughby borne at Midleton in the Chamber over the Kitchen the nineth day of Aprill at a quarter & half past ten of the clocke at night being Tuesday night in Anno Domini 1672. Easter weeke.”

On next page is written:—

“My Dearest Mr. Willughby
departed this life y^e 3rd of July, 1672.”

On the next page opposite the last is written:—

“It pleased God to take
from me my Deare Child
Francis Willughby y^e 14th
day of September, 1688.”

On the next page is written in a later hand:—

“This prayer book belonged to Emma Barnard wife of the

Natural Philosopher Francis Willoughby of Wollaton. The 3 children mentioned:—the eldest who died at the age of 20 was Sir Francis Willoughby, Bt., 2 Cassandra who married the Duke of Chandos, 3 Sir Thomas Willoughby who was 1st Lord Middleton, Emma widow of the Philosopher afterward married Sir Josiah Child, Bart., by whom she had 3 children. The eldest son died young, the 2nd was the 1st Earl Tilney of Wanstead in Essex."

Wollaton Church was next visited, and here the rector, the Rev. H. C. RUSSELL, received the party and gave an account of the building, pointing out the tablet in the south aisle to Robert Smithson, the "architector and surveyor" of Wollaton. Mr. HOPE described the two fine monuments to (1) Sir Richard Willoughby (1471) and his wife in the north wall of the chancel, and (2) Sir Henry Willoughby (1528), whose effigy is surrounded by small figures of his four wives. Both monuments have a cadaver beneath. In the south chapel is an eighteenth century marble altar on a framework of wrought iron of very good design, of much the same date as, and probably originally belonging to the elaborate panelled altar-piece of oak still in the chancel of the church. Architecturally the church is of no great interest; the north nave arcade is poor work of fourteenth century date, and the nave has been lengthened in the second half of the fifteenth century and a western tower added, which, reaching to the boundary of the churchyard, has open arches on north and south to enable processions to go round the church without having to leave the churchyard enclosure.

A short drive brought the party to Sandiacre, where, after lunch at the "Red Lion," the church, which stands on a fine and lofty site to the north of the village, was visited under the guidance of Mr. HOPE. It has a twelfth century nave with a south doorway, a single window on each side of the nave, and a fine chancel arch. The western tower and spire are of the thirteenth century. The chancel is of good fourteenth century work, perhaps built by Roger de Norbury, Bishop of Lichfield 1322-1359, who held the prebend of Sandiacre from 1342 to 1347. All the window tracery and the parapets, etc., are new, but are believed to be copies of the old, which were "restored" in 1864. The sedilia are good examples, with rich canopies. A large early fourteenth century window has been inserted in the south wall of the nave to light the nave altars, and in the sixteenth century a low clearstory was added. The font is of the fifteenth century. Mr. Hope referred to a scheme which has been proposed for enlarging the church by adding an aisle or aisles; but while admitting the necessity for making room for the parishioners, he suggested as an alternative the building of a new church nearer to the town.

Amid a drenching rain, the journey was resumed to Strelley, a brief halt being made on the way to examine the remains of the cross at Stapleford, a monolith pillar covered with Saxon knotwork and carving. At Strelley the chief features of the church were pointed out by Mr. Hope. The lower part of the western tower, of the thirteenth century, is the oldest portion, the remainder of the church, consisting of a lofty nave of three bays and a chancel with north and

south transept-like chapels, having been all rebuilt about 1356, perhaps at the cost of Sir Samson Strelley, whose alabaster tomb with effigies of himself and lady stands in the middle of the chancel. Early in the sixteenth century a clearstory was added and the tower raised a stage. The church retains a fine late rood-screen with the coving and rafters that carried the rood-loft. On the north of the altar is an alabaster tomb, with effigies, to Sir John Strelley, *ob.* 1501, and wife, Sanchia Willoughby, beneath an elaborate stone canopy from the same hand as one in Wollaton Church. In the chancel floor are several alabaster slabs and a brass to Sir Robert Strelley (*ob.* 1487) and his wife Isabel, sister of Cardinal Kemp.

On leaving the church a very welcome tea was provided at Strelley Hall by the kindness of Mr. and Mrs. Edge, and at half past five the carriages started on the journey back to Nottingham. The evening meeting was held in the "George" Hotel on account of the bad weather. Mr. J. T. Micklethwaite in the chair. Mr. C. R. PEERS, F.S.A., read a paper on "The Saxon Churches of the St. Pancras Type," which is printed at p. 402. Mr. W. H. ST. JOHN HOPE followed with a short paper on "The Arms of Colchester and Nottingham," printed at p. 398.

Friday, July 26th.

The General Annual Meeting of the members of the Institute was held at 10 a.m. in the Exchange Council Room, the President, Sir HENRY HOWORTH, in the chair. The minutes of the last meeting were read and approved. The balance sheet, printed at p. 449, was taken as read. The Hon. Secretary then read the report for the past year.

REPORT OF COUNCIL FOR THE YEAR 1900-1901.

The fifty-ninth annual report of the Council on the finances and affairs of the Institute shows the cash income and expenditure with progressive improvement. The balance in hand is £190 12s. This compared with last year presents an apparent decrease, but it will be seen in the account that a further sum of £200 has been added to the deposit with the bankers, so that the total shows an increase of £91 16s. The actual cash asset is now £590 12s.

There are no outstanding liabilities and the subscriptions in arrear are the smallest in amount ever experienced. The accounts have been rigidly examined by the chartered accountant and duly certified. All other services for the management continue to be honorary.

The membership list shows that nineteen have died, of whom nine were life members, and five have resigned. Thirteen new annual subscribers have been elected, thus about equalizing the result as affecting the income of the Institute.

Of those who have passed away, Mr. Arthur Cates and Mr. J. Park Harrison must be noticed. Mr. Park Harrison was one of the earliest movers in the revival of the practice of Gothic architecture.

He was an indefatigable worker and has contributed often to our *Proceedings*.

The members of the Council retiring are Mr. Talfourd Ely, Mr. Mill Stephenson, Mr. Wright Taylor, Mr. Longden, Mr. Day, Professor Petrie, Mr. Somers Clarke, and Mr. Wilson. Professor Boyd Dawkins ceases to be a Vice-President by effluxion of time.

It is proposed that Dr. Robert Munro be elected a Vice-President, and that Messrs. Talfourd Ely, Stephenson, Taylor, Longden, and Wilson be re-elected, and that Messrs. Boyd Dawkins, Auden, Goolden, and Goddard be added to the Council, and that Mr. Challenor Smith be elected auditor.

The great loss the nation has sustained by the death of Her Majesty Queen Victoria was officially noticed by the President and Council on behalf of the Institute by the presentation of the address printed in the *Journal*. The Council has now the honour of placing on record that His Majesty King Edward VII. has been pleased to signify his consent to continue the royal patronage and has become Patron of the Institute.

Acting on the resolution of the last Annual Meeting, the offer of the books was made to and cordially accepted by the Society of Antiquaries. The Council has resumed possession of the library and removed it from the custody of University College. Certain delays in effecting this have hitherto prevented the completion of the full arrangement, but the matter will be settled at an early date. The new general index to the first fifty volumes of the *Journal* is in hand.

On the motion of the President the report was adopted.

Several suggestions were made as to the place of next year's meetings, Worcester, York, and South Wales being mentioned.

On the proposal of the President a resolution was passed pointing out the desirability of printing the chartularies of Rufford and Welbeck Abbeys and the Priory of Newstead.

At 12 o'clock the members started by train for Mansfield, and after lunch in the Town Hall prepared to start for the drive to Hardwick Hall, but were delayed half an hour by a tremendous downpour of rain. Arriving eventually at Hardwick, they were most courteously received by Lady Louisa Egerton, and assembled in the great hall to hear a paper by Mr. J. A. GOTCH, F.S.A., which is printed at p. 441. On the conclusion of the paper, the upper rooms, with their wonderful collection of tapestry, were thrown open for inspection. A most interesting feature was the chapel, with the desk hangings made of the orphreys of mediaeval copes, and the great plaster frieze of the presence chamber, moulded and painted, was generally admired. Mr. Micklethwaite was of opinion that the room had once had a moulded plaster ceiling, like that remaining in the long gallery. A fine alabaster panel of Apollo and the Muses, with E. R. and the royal arms of England, was considered to be English by Mr. Hope. After spending some time among the pictures in the long gallery, the members left the Hall, and with a passing look at the ruins of the old Hall, which is not many years older than the present building, drove back to Mansfield, and thence took the train to Nottingham.

In the evening, Mr. Robert Evans being in the chair, Mr. E. W.

BRABROOK, C.B., F.S.A., read a paper on "Robin Hood." He considered that the claims of Robin to be a real person and not a myth were to be taken seriously, and that he was born somewhere about 1160. Ballads of Robin Hood were popular 200 years after this time, if not earlier, and in the sixteenth century his fame was great and widely spread.

Saturday, July 27th.

After the heavy rain of Friday the weather showed signs of improvement, and with the exception of a shower on the way to Newark, Saturday was fine and sunny. Newark was reached at 10 o'clock, by special train, and the castle was visited, with Mr. JOHN BILSON, F.S.A., as guide. Beginning with the history of the site, Mr. Bilson said that the earliest record of Newark was during the reign of Edward the Confessor, when it was given to Stow, then a newly constituted church of secular canons, by Leofric of Mercia and his wife Godiva. Remigius, Bishop of Lincoln, held the manor at the date of the Domesday Survey, and his successor, Robert Bloet, redeemed the lands which had been given to Stow. Alexander, Bishop of Lincoln 1123-1147, built castles at Sleaford and Newark, as recorded by William of Malmesbury, who describes the castle as on the river of Trent; it is really on the Devon. In 1139 Alexander surrendered the castle to Stephen. In the reign of John it was held for the King during a siege by the Barons under Gilbert de Gant, Earl of Lincoln; it was relieved by John himself, who died here in 1216. In 1217 it was seized by the Barons, but again surrendered after a siege, and restored to the Bishops of Lincoln. In 1487 Henry VII. was here, on his way to Stoke to attack Lambert Simnel, the pretended Earl of Warwick. Wolsey lived in the castle in 1530, after his fall, and before he went to Southwell; at the time, and until 1547, it was in the possession of the Bishops of Lincoln, but it was then alienated to the Crown, and so remained. In the civil wars the castle played a prominent part; it was four times besieged, but never taken. Finally, in 1646, its earthworks were destroyed and the buildings dismantled.

The dimensions of the castle are:—294 feet in length on the west or river side, and 84 feet from the north-west angle to the centre of the gateway on the north side, and therefore perhaps 168 feet in all on this face. Traces of a polygonal tower equidistant with the north-west angle from the north gateway are said to have been found. It was protected by the Devon on the west, and moated on the other three sides. The barbican stood on the outer edge of the moat, and the gateway had a drawbridge.

Of the work of Bishop Alexander three fragments are left—the gateway on the north, a square tower at the south-west, and a small part of the west wall. The gateway is of unusual size, 44 feet 6 inches north to south by 30 feet east to west. In plan it resembles the gateway of Bamborough, shown on the sixteenth century plan, and that of Prudhoe, which is, however, smaller. It is three stories high, with a vice on the east side in a square turret, originally entered from the east. Above it is octagonal and of smaller size. In the external face of the lowest stage is a large

semi-circular archway flanked by buttresses, with an arch of two square orders, and a hood mould with double fillet and scallop ornament; it had no doors or portcullis. In the second stage are three round-headed windows, now blocked and partly cut into by sixteenth century inserted openings. Above is a string with "folded ribbon" ornament. The upper stage has had two small windows with shafted jambs and square heads under a round arch. The central archway of the gate was fitted with doors, behind which on the west is a small recess for the warder, with a spyhole under an arched head. Round the inner gate-chamber is a low plinth, and there may have been a bench; the room over had a wooden floor. The inner archway had no doors; above it in the upper stage was a circular window. In the east and west walls, on the second stage, are round-headed windows with shafted jambs and heads with roll moulding, at a higher level than the others. Alexander built a chapel here dedicated to Sts. Philip and James, and probably these windows may belong to it. The west wall has a large round-headed window, now blocked. The difference between Alexander's work and the later building is here clearly to be seen, the former being in oolite with wide joints, the latter in red sandstone, more finely jointed, and built with larger stones.

The south-west tower measures 24 feet north to south and 15 feet east to west. It is of four stages, each recessed, and the west face batters considerably; the basement stage is partly a later addition. The tower is plain and massive, with no ornament except a roll above the lowest stage; parts of the original windows remain, and adjoining its south face is a fragment of the contemporary south wall of the castle. In a small room on the second floor of this tower King John is said to have died, but there is no evidence to support the tradition. Some part of the lower walling of the west front may also belong to Alexander's work, or to the time immediately succeeding.

In the thirteenth century the whole of the west front, with the exceptions mentioned, was rebuilt, as well as the north face between the north-west tower and the original wall by the gatehouse. To the same period belongs the hexagonal tower at the north-west angle, which replaced a square tower like that which remains at the south-west angle. Midway between the two was a similar but smaller tower. Part of the embattled and pierced parapet of this date remains near the south-west tower.

Somewhat north of the centre of the west front, and entered from the terrace by a flight of steps, is a vaulted chamber 45 feet by 22 feet, with a central arcade of four round-headed arches of late twelfth century date, resting on octagonal pillars, reconstructed in the fourteenth century. The vaults are plain quadripartite without ribs. The round-headed doorway in the west front is probably coeval with this work. Four narrow slits give light to the room, and a fifth lights a narrow chamber to the north of it. The original staircase was at the north end, and ascended partly with steps and partly with inclines.

Above the vaulted room was the hall. The west wall only remains, and has several windows and an oriel of fifteenth century date. Above is a shield bearing *Three stags, 2 and 1*. Other windows are of later fifteenth or sixteenth century date.

No traces of the keep or any other buildings remain.

Leaving the castle, a drive of two miles brought the members to Hawton Church, which was described by Mr. HOPE. The western tower, he said, was the work of Sir Thomas Molineux, of Sefton and Hawton, who died in 1491, and whose arms, with those of his second wife, were in the spandrels of the west doorway. To him was also probably due the clearstory and upper parts of the aisles, together with the wooden roofs, but the arcades and aisle walls were of the thirteenth century. The quoins of the Norman nave remain against the tower. But the glory of the church is the beautiful chancel of three bays, with its splendid sedilia, Easter sepulchre, and founder's tomb and effigy, all of richly carved work, built by Sir Robert Compton, lord of Fenny Compton and Hawton, who died in 1330. Some discussion took place concerning the Easter sepulchre, which Mr. Micklethwaite thought might also have been used as a "sacrament house" after the Scottish manner. Mr. Hope also called attention to the rood screen and the old benches in the nave. On the motion of Sir HENRY HOWORTH, a sincere vote of sympathy was passed to the rector, the Rev. R. Washington, who was prevented from being present owing to the death of his wife on the previous day.

Returning to Newark, lunch was taken at the "Saracen's Head," and at 1.30 a move was made for the Town Hall, where the Mayor, Mr. F. Atter, courteously welcomed the members, and invited their inspection of the church and Corporation plate, most kindly brought together for the occasion. Mr. CORNELIUS BROWN gave a description of the most important pieces, noticing a communion cup of 1641, the rest of the old sacramental plate being the gift of Lady Frances Leeke, 1705. The alms-dishes with handles are of 1730 and 1744. Of the Corporation plate the finest example was a monteith (hall mark London, 1693), $6\frac{1}{2}$ inches high and 11 inches in diameter, inscribed "This munteth and thirteen cups given by the Honorable Nicholas Saunderson to the Corporation of Newark, Anno 1689. Mr. Clarke, Mayor." The thirteen cups remain, with their original circular leather case—they have one common cover.

Other interesting pieces were:—

Small drum tankard, $6\frac{1}{2}$ inches high, with flat lid, inscribed "The guift of Thomas Jennison, late Alderman of Newark-upon-Trent." Hall mark London, 1641.

Tankard, given by Mr. John Johnson, twice Mayor, 1667–8. Hall mark London, 1667.

Tankard, given by Mr. Dan Crayle. Hall mark London, 1727–8.

Three pewter cups, $9\frac{3}{4}$ inches high, with no marks or inscriptions.

The large mace, *temp.* Charles II., silver gilt, 3 feet 10 inches long, chased with a running pattern of roses and thistles. The head divided into panels, with the royal badges and the initials C. R.

The lesser mace, *temp.* Charles II., silver gilt, 35 inches long. The head bears the royal badges and the initials C. R. surmounted by a royal crown.

The Mayor's wand of black wood. Head inscribed "The guift of Mr. Edmund Mason, Vicar A.D. 1617."

After a cordial vote of thanks to the Mayor, the splendid parish church of St. Mary Magdalen was visited. Mr. JOHN BILSON, F.S.A., gave an account of the building. He said that the church was given by Robert de Chesney, Bishop of Lincoln (1147-1167) to his new Gilbertine foundation, the Priory of St. Catherine near Lincoln. Shortly after this, important building work was begun in the church, of which two fragments remain, a crypt of three bays under part of the chancel, and the crossing piers. The crypt has quadripartite ribbed vaults; the transverse arches are pointed, of flat segmental form, the two eastern being broad with keeled mouldings at each angle, the western narrower with one keeled moulding only. The diagonal ribs are like the latter. The eastern bay is narrower than the western, and the crypt doubtless extended farther at both ends, the eastern end being probably on the line of the piers of the present arcade which flanks the reredos; this would give the east end of the original church, in which case the chancel would have been about 60 feet long and aisleless. Such crypts are not common in parish churches. The crossing piers have on each face three attached shafts with a small quarter-round between; the outer shafts have been destroyed on the transept sides, and the capitals with square abaci remain on the western piers only. The bases have a torus of elliptical section. These piers probably belonged to an aisleless cruciform church. Sir G. G. Scott thought that the nave had aisles and clearstory, and that the piers were too slight for a central tower, especially as the western tower was begun so soon after the building of the crossing. But if the church was aisleless there would be plenty of strength to carry a lantern, and the walls at the crossing are 3 feet 8 inches thick.

The great west tower was begun about 1230, and originally designed to project from the west front of the church. It is about 30 feet square, exclusive of the buttresses. But before the work had gone very far it was decided to extend the aisles westward to the line of the west face of the tower. The north and south arches of the tower show no signs of subsequent insertion, and are in detail very like the east arch. Examples of an early engaged west tower in a similar position may be noted at Conisborough, late twelfth century, and Tickhill, *circa* 1200. The thirteenth century work in the tower extends to one stage above the nave roof. The buttresses are of no great projection, arcaded on the lower stage, and plain above; they set back slightly at each stage and finish with gabled heads under the topmost string of the thirteenth century work. The west doorway is very fine, with shafts and richly moulded arch, flanked by a single wall arch on either side. The stage above has had an arcade, now much obliterated by a fifteenth century window. It is surmounted by a plain stage of no great height, and this in turn by a fine arcaded story having two wide central openings between two narrower blank arches, all with shafts; above them the masonry face is covered with a lozenge diaper like that on the centre tower of Lincoln. Here the thirteenth century work stops unfinished, and was not again taken up for some eighty years. When building began again the neighbouring tower of Grantham had been completed, and no doubt the men of Newark started with the intention of making their tower as good as or better

than that of their neighbours. But they were handicapped by having no angle buttresses to carry up, the thirteenth century buttresses having stopped just at the base of their new work; so they had to contrive buttresses by setting back all but the angles of their new work from the square of the old tower which was their base, and treating the angles carried up flush with the older walls as buttresses to their belfry stage. This stage is excellently designed, with two coupled two-light belfry windows on each face under a crocketed gable mould. Niches containing figures are on either side of and in the pediment over the windows. The buttresses set back and finish under the parapet with crocketed gable-heads, arcaded in the upper part below the gables. Over these a panelled parapet projects, with hexagonal angle pinnacles pierced by a small passage and finished with crocketed spirelets. Behind them the lofty broaches lead up to the octagonal spire, having rolls flanked by hollows on each angle. There are four tiers of richly designed spire-lights.

Next in point of date to the tower is the south aisle of the nave. In 1312 Archbishop Greenfield granted a license to the parishioners to remove a chapel built by Archbishop Henry of Newark (1298-9) in the churchyard, and to use the materials for the fabric of the church and the construction of a certain aisle which it was proposed to build anew. This was probably the present south aisle, which seems to have been finished but little before the Black Death. The windows are of four lights with shafted jambs and good flowing tracery, the west window having six lights. The buttresses have two tiers of crocketed gable-heads and a niche for an image under the lower head.

The comparative dates of the rest of the church are difficult to fix, and there is very little difference in detail. The Corporation records show large payments to carvers in 1460, as if some work was then approaching completion. In 1482 occurs a bequest to the new fabric of the chancel, and another in 1483 to the new building of the chancel, if it shall be new built; showing that work was then in contemplation, but apparently not yet begun. In the glass of the east window was an inscription mentioned by Thoroton, of date not later than 1500, by which time therefore the work must have been complete.

The setting out of the nave shows that the spacing of the north aisle agrees with that of both arcades, and the aisle was probably built first. In the chancel the eastern bay is narrower than the rest, and taken in conjunction with the evidence of the crypt, points to an eastward enlargement from the line of the old east wall; its details also differ from the east ends of the chancel aisles. The chancel arcades are lofty with slender piers, the clearstory somewhat low, two windows to a bay; the details are rather poor, but the exterior is distinctly better than the interior. The sanctus bell cote remains, and there is a stair turret in the north aisle.

There were fourteen chantries founded in the church, all before 1402, and eight before 1349. There were fourteen altars, besides the high altar, but the sites of very few are known—Holy Trinity altar, in the south transept; Our Lady, on the north side of the church; and Jesus altar, probably in the south choir aisle. The others were:

Corpus Christi, St. Lawrence, St. Nicholas. St. Catherine, St. James St. Peter, St. Stephen, All Saints, St. George the Martyr, Holy Rood, and St. Saviour.

In connection with the chancel fittings, documentary evidence is available as follows :—

- 1496. Reparation of high altar.
- 1498. Fabric of reredos behind high altar and fabric of chancel stalls.
- 1501. *Nova tabula* for high altar.
- 1508. Making of reredos by Thomas Drawswerd, of York, carver.
- 1509. Gilding of "rodehouse."
- 1521. Right hand half of choir stalls.
- 1524. "Stallyng" of choir.
- 1529. Gilding of high altar.

The chantry chapels flanking the high altar are those of, on the north, Thomas Mering, 1500, and on the south, Robert (?) Markham, 1505.

The south porch of the nave is a late addition of two stories. It has a niche with figures of the Virgin and Child on the south front, and contains a library bequeathed by Thomas White, Bishop of Peterborough, 1685-9.

The font, of 1660, replaces one destroyed in 1646.

The brasses were shortly described by Mr. A. R. Bax, especially the very fine Flemish brass of Alan le Fleming, 1361.

On leaving the church, the drive was continued to Holme, where the Rev. W. T. BARRY received the visitors, and the Rev. A. F. SUTTON described the church as follows :

The earliest record relating to the parish of Holme is contained in a deed dated 1262, and bearing the seal of the Chapter of Southwell, which confirms a grant made by Richard de Sutton to Hugh de Mortan, his chamberlain; and in 1339, William de Northwell, clerk, settled land at Holme upon Henry Graving, of Northwell. When Rufford Abbey was suppressed the lands attached thereto at Holme were granted to the Earl of Shrewsbury. Early in the seventeenth century the greater part of Holme belonged to Sir Thomas Barton, a man of great property in Lancashire; an ancestor of his, according to Thoroton, "built a fair stone house in the village, and being a merchant of the Staple he piously recorded the source of his wealth by placing in the window of the same house this posie :—

" 'I thank God and ever shall
It was the sheep that paid for all.' "

The Barton estate at Holme passed into the hands of the noble family of Bellasis through the marriage of the heiress with Lord Bellasis, son of the first Lord Fauconberg. It was the same Lord Bellasis who so gallantly defended Newark. He died in 1689, and was buried at the church of St. Giles-in-the-Fields, London.

Holme Hall stands upon an estate once the property of Archbishop Secker; at the present time the greater part of the parish belongs to the Duke of Newcastle. The parish church of St. Giles, though it retains some fragments of early work, owes its enlarged proportions

and most interesting details to the munificence of the Barton family, one of whom is recorded as having built "a fair chapel like a parish church," no doubt alluding to the south aisle and the chapel on the south side of the chancel. The earliest portion of the present building is a length of roughly worked string course under the east window, which seems to belong to the Norman period. There is nothing else remaining of the church of that date, but the north door of the nave is undoubtedly Early English, the nail-head ornaments on the narrow capitals supporting the plain chamfered arch being characteristic of the thirteenth century. The north side of the church and the greater part of the east wall seem as though they might belong to this period. In the fourteenth century the church was almost entirely rebuilt, the ground plan at that time consisting of nave with western tower and spire, and chancel. The north side of the nave is built of blue lias, a poor local stone, and does not seem ever to have had any windows; there is, however, one original buttress, but this does not seem to have been sufficient to prevent the walls from leaning outwards, as some large brick buttresses were added in comparatively recent years to keep it up. The tower belongs to the Decorated period and is in three stages; the lowest one opens into the nave by a narrow arch with embattled capitals. The whole of the west wall is taken up by a large four-light late Perpendicular window, the insertion of which must have weakened the tower very much and probably accounts for its present dangerous condition. The upper stage has two-light belfry windows in each side in a more or less dilapidated condition, except that on the south, which is a simple two-light Decorated window. The whole is surmounted by a low broach spire with single spire lights on each of the cardinal faces. The upper part seems to have been rebuilt, and the finial is a later addition. The doorway in the south aisle, which gives access to the staircase to the parvise, from its mouldings appears to belong to the Decorated period and was probably rebuilt in its present position when the church was enlarged.

This was in the Perpendicular period, when most important alterations and additions to the fabric were made. The tower was strengthened by the addition of buttresses, that at the north-west angle having an ornamental panel on the face with the Barton arms carved in it. The north wall of the chancel seems to have been rebuilt and two large four-light windows inserted, and the five-light east window, with remarkably good Perpendicular tracery, was made at the same time. A south aisle was then added to the nave, and a chapel on the south side of the chancel, also the south porch, with parvise over, reached by a circular turret staircase. The seats, screens, and stained glass were all added in the fifteenth century. The arcade between the nave and aisle consists of three well moulded arches with roughly worked capitals. The two three-light windows in this aisle and the four-light one are similar in design. There does not seem ever to have been any chancel arch. On either side of the window above the altar are small brackets for *figuros*. Between the chancel and the chapel is an arcade of two unequal arches, very much the same in design as the nave arcade, but the capitals have a rather unusual ornamentation of square projecting bosses carved on them. The western arch is filled up by a carved oak parclose screen,

the eastern by the Barton tomb. The roofs of the church are comparatively late and poor in design, and look worse outside from having been covered by common pantiles and the pitch raised. Inside many of the corbels which supported the original roof remain, and are well worthy of careful examination. The south aisle and chapel were originally covered by a nearly flat roof, the line of which may be seen outside at the west end. A wide spreading arch resting on corbels separates the aisle from the chapel; a doorway in the south wall near this arch seems to have been the entrance to this chapel from the outside. Underneath the arch is a carved oak screen in a fair state of preservation; one of the doors remains. The chapel is fitted with very massive oak benches and kneeling desks, the bench ends are finely carved with angels and grotesque animals. On either side of the east window of this chapel are canopied niches which, even in their mutilated condition, are fine examples of stone carving; projecting from the under side of the one on the north is the figure of a deacon, in a dalmatic, holding a chalice. In the south wall is a very beautiful piscina, the drain being formed of a flower with holes cut at the junction of the petals; over the arched recess is a crocketed ogee hood mould; the flanking pinnacles and the finial are gone. The windows in this chapel, two on the south side and the east window, follow the same design as the others in the rest of the church. This chapel was no doubt a chantry chapel of the Barton family, and the tomb under the eastern arch bears the effigies of a man and woman, who most likely were members of that family, though there is no inscription or armorial bearings by which we may identify them. The lower part of the tomb seems to have been reconstructed; it has been suggested that it may have been made for the husband and altered when the figure of his wife was added. Under an arch is a cadaver in a winding sheet, and round the stone on which it rests is the following inscription in Latin from the Book of Job, "Pity me, pity me you my friends, because the hand of the Lord hath touched me"; above this, on the upper surface of the tomb, are the figures of a man and a woman, the former in a long flowing garment with a bag at his waist, and a ton at his feet; the woman has a very finely worked girdle and her feet rest on a dog. Under the altar an altar slab has been set in the floor; it is quite perfect and retains the usual five crosses; before it was placed in its present position it was in the floor of the nave. It is too small to have been the high altar, but may have belonged to an altar before the rood screen.

Nearly all the original bench ends remain, they are simple in design with carved tops, but at the end of the south aisle is a small narrow one elaborately carved. There are several interesting remains of stained glass which give some idea of what the windows must have looked like when they were all filled; in the north-east window of the chancel are parts of the figure of a bishop, but it is put in upside down, the chasuble and dalmatic are very perfect; the merchant's mark, which may be seen on other parts of the church, appears on the glass, as well as B and a ton outside; the plinth mouldings of the porch and south aisle are very fine, and on the parapet of the aisle a rose with leaves and a stem is carved, and a short distance from it a grotesque animal.

But the porch is perhaps as interesting as any part of the building, and especially so to a student of heraldry. It is of the late Perpendicular period, the lower part serving as a porch and the main entrance to the church; both the outer archway and the door into the south aisle, have low four-centred arches; inside to the right of the door is a holy water stoup with panelled sides; above this is a parvise reached by a staircase with doorway in the south aisle. This chamber is lighted by a three-light perpendicular window, and retains its original roof; in it are the remains of a mediaeval chest with a good iron lock plate. This room has been called "Nan Scott's chamber," because an old woman of that name is supposed to have taken up her abode here during the plague which visited Holme in 1666.

Over the archway of this porch, outside, and under the window, are seven shields.

- I. Quarterly of 8. 1 and 4 *az.* on a fesse between 3 bucks' heads cabossed *or*, a mullet *sa.* (Barton); 2 and 3 *arg.* 2 bends engrailed *sa.* (Ratcliffe); 5 and 8 *arg.* a mullet voided *sa.* (Assheton); 6 and 7 *gu.* a cross engrailed *arg.* (Leigh). The letters R and K are cut on either side of this shield, and below it two sprigs of oak.
- II. *Sa.* a bend between 6 crosses crosslet, *arg.* (Longvillers, and borne by Stanhope) impaling *az.* a cross moline quarter pierced *or* (Molyneux) with the letters I and S on either side.
- III. *Az.* on a fesse between three bucks' heads cabossed *or* a mullet *sa.*, with the letters I and B. on either side a sprig of oak and a dolphin embowed, below it two bears on tons.
- IV. Barry nebuly of 6 *arg.* and *sa.*, on a chief *gu.* a lion passant guardant *or* (Staple of Calais) with on one side a falchion, on the other two snakes intertwined, and below two sheep.
- V. *Arg.* a merchant's mark *sa.* with the letters I and B on either side, below two bales of wool, each marked with 3 estoiles of 6 points in fesse.
- VI. Barton impaling *or* on a fesse *gu.* 3 water bougets *erm.* (Bingham) with the letters I and R on either side.
- VII. Barton impaling quarterly 1 and 4 Ratcliffe, 2 and 5 Leigh, 3 and 6 Ashton, with the letters R and B. on either side and two sprigs of oak below.

Driving back to Newark, the members returned to the Town Hall, where tea was hospitably provided by the Mayor, and afterwards left for Nottingham by train.

Monday, July 29th.

This day was again fine and sunny. Starting from the Midland Station, Worksop was reached at 10.50, and carriages were in readiness to convey the members to the Priory church, which was described by the Rector, the Rev. H. T. SLODDEN.

It consists of a fine rich Norman nave of eleven bays, with triforium and clearstory, and two western towers, all of which

owe their preservation to the fact that the nave was the parish church. The eastern portion, which was the church of the Priory of Austin Canons founded here in 1103, has entirely disappeared, with the exception of a ruined thirteenth century chapel, that formerly opened out of the south transept. Some remains of the western range of the monastic buildings are left, and the vaulted outer parlour now forms the vestry. All the old fittings of the church have disappeared, and, as was pointed out by Mr. Hope, a series of large square-headed windows in the south aisle, that lighted the parish choir and altar, were "restored" away by Sir Gilbert Scott in 1845. An alabaster effigy of a lady and two other mutilated figures of William Lord Furnival (*ob.* 1383) and Sir Thomas Neville (+ 1406) lie on the floor in the western part of the nave, and might be taken better care of. A move was next made to the fine fourteenth century gatehouse, a very complete example, with the "casual ward" for the lodging of tramps on the first floor. On the south side of the entrance a small and richly decorated chapel of curious construction has been added to contain some image of peculiar veneration. From existing sculptures of the Annunciation and of the Adoration of the Three Kings, the image was, perhaps, one of Our Lady. Other images of St. William (?), St. Cuthbert, and the Holy Trinity adorn the front of the gatehouse, before which stand the steps and part of the shaft of a cross.

After lunch the journey was resumed in carriages to Blyth, where the church was described by Mr. W. H. ST. JOHN HOPE. It originally, he said, like the churches at Thurgarton and Worksop, formed part of a monastic church founded for Benedictine monks in 1088 by Roger de Builli as a cell of the Abbey of St. Katharine at Rouen, and owed its preservation, as in the other cases cited, to the fact that it served as the parish church, which was given as part of the endowment of the priory. The monastic part of the church had been utterly destroyed, but the nave and its aisles of seven bays remained, together with a western tower of later date. The nave and north aisle formed part of the first church of 1088, but a slight pause had occurred in the building, since the lower part of the north wall indicated a setting out that was not eventually followed, and the bays of the aisle were now oblong instead of square, as first planned. The early character of the work, in arcades, triforium, and clearstory, was pointed out, but the original flat ceiling of the nave had given place to a thirteenth century quadripartite vault. The early Norman unribbed vault was left in the north aisle. The south aisle was replaced by another of greater width about 1290, with a wooden roof only, and to it the parish altar seems to have been transferred. The south porch was of the same date. Late in the fourteenth century a new tower was begun within the last bay of the nave, after the manner of that at Furness Abbey, but Mr. Hope said he could see no reason for its being so built here unless the old western boundary of the cemetery had then been close up to the church. The tower seemed to have been slowly built by stages and not finished until well in the fifteenth century. Of the fittings the old wooden transverse screens remained, with painted figures of saints, and there were some good seventeenth century pews at the west end. Several interesting floor slabs remained, and an early Purbeck marble effigy of a knight in

flat-topped helm with a lozengy shield and surcoat, perhaps a Fitzwilliam.

The return journey was by rail, reaching Nottingham at 7 o'clock. The concluding meeting was held in the Exchange Council Room, the President in the chair. Votes of thanks were given to Lord Hawkesbury, President of the Meeting, the Vice-Presidents, the Mayor of Nottingham, Mr. G. H. Wallis, the local Secretary for the Meeting, the local Committee, the readers of papers and the guides at the various places visited, the Director, and the Meeting Secretary. A vote of thanks to Sir Henry Howorth concluded the proceedings.

Tuesday, July 30th.

The members left by train to Aslockton for the final day's excursion, arriving about 10 o'clock, and walked to Whatton church, where Mr. MONTAGU H. HALL gave an excellent description of the building. The dedication is in honour of St. John of Beverley, and the church consists of chancel, central tower and spire, and nave with north and south aisles and porches. It has suffered much from the "restorer." In 1808 the south transept was pulled down entirely, and the Norman archway, now on the north side, was blocked up. The south aisle was entirely rebuilt of brick and stucco, with large hideous windows uniform with those in the north aisle. All the monuments were crammed into the east end of the north aisle away from view, and it was then probably that the north side of the Newmarch tomb was destroyed and replaced by bricks. A painted wooden screen hid the monuments from view, and there was a large gallery at the west end. In 1848 the chancel was pulled down and the present one built about 3 feet shorter. In 1870 the church was further restored, at a cost of £2,000. The tower was in an unsafe state and unable to bear the spire, being only held together by iron cramps. It was pulled down and new foundations were put in, a small late doorway on the north side being done away with and a new one made on the south side. It was impossible to rebuild the transept owing to graves. The tower was rebuilt about 3 feet higher, the old pinnacles and battlement put on, and the spire rebuilt stone for stone as the old. All the other parts of the tower are quite new. It is remarkable that the dormer windows lie in the same plane as the octagonal side of the spire, and not perpendicularly, as is usual. In the old tower the bells were rung from below, but the increased height has allowed of a ringers' loft, access to which is by a new staircase built in 1870, an internal wooden ladder being in use previously. The nave arcades, of fourteenth century date, are of three bays with octagonal pillars, and the north porch is coeval with them. There are no old fittings except the font, which is of a curious local type, and dated 1662. The church contains some interesting monuments, which were described by Mr. HOPE. The earliest is the effigy of Sir Richard de Whatton, known to antiquaries from the engraving by Stothard, but since restored. The next is an early fourteenth century figure of a canon of Welbeck under an arch in the north aisle wall, and a third is a fine alabaster tomb with shields of arms in low relief (partly restored), and effigy of a knight of the

Newmarch family *circa* 1380. There is also an incised slab to Thomas Cranmer, father of the Archbishop, who died in 1501. Some interesting fragments of the early effigies of another knight and his lady and of a fourteenth century village cross with figures of saints are preserved in the north aisle. A five-mile drive brought the party to Bottesford, where they were welcomed by Canon Vincent Jackson, and Mr. E. B. S. SHEPHERD described the church as follows:

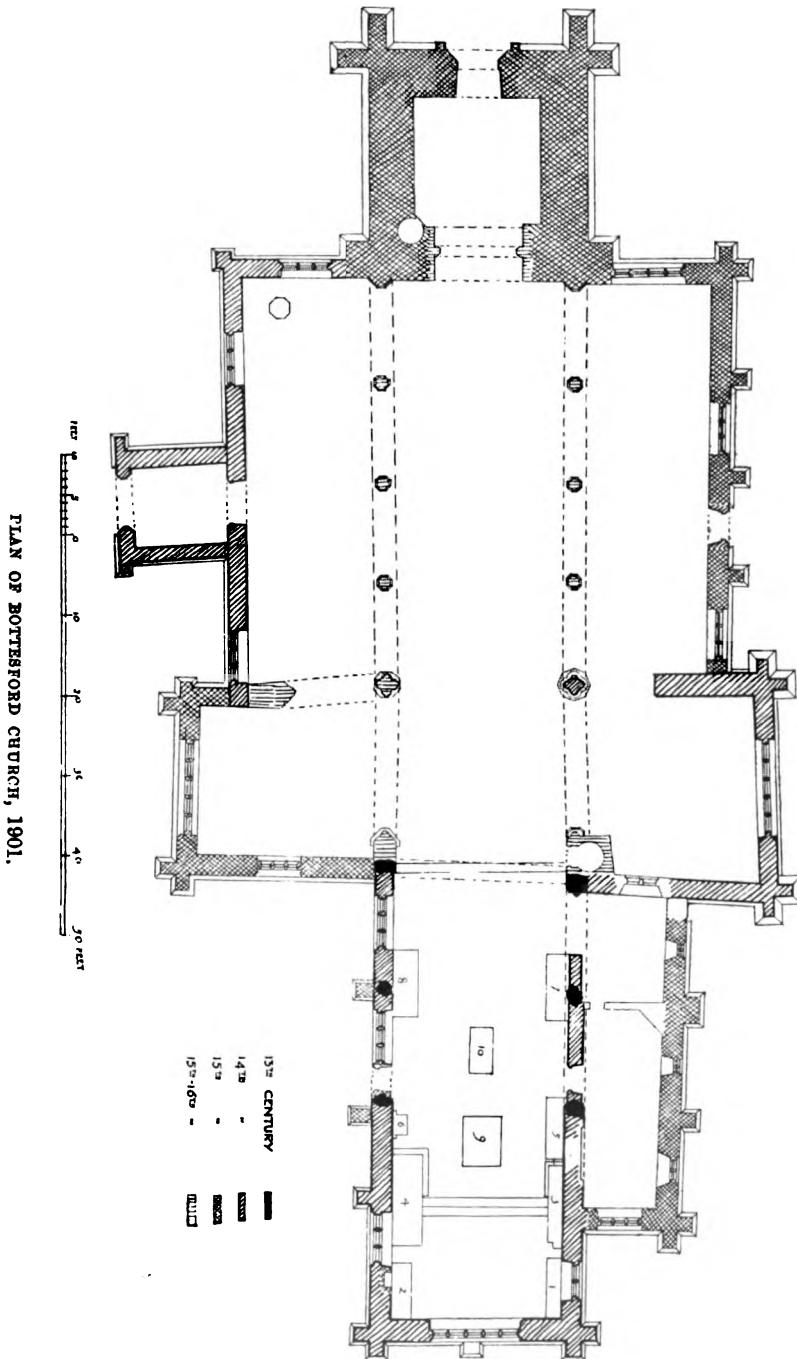
For this account of the church at Bottesford almost the only document which I have at my disposal is the building itself; if written records exist which would help to elucidate it, they are unknown to me, and I gather that the experience of most who have made the fabric of a parish church the subject of an inquiry, squares with mine that such records are difficult to find.

A glance at the plan of the church is enough to show that we have here a somewhat complicated problem to unravel, but the application of what I may call Mr. Mickethwaite's method, together with comparisons drawn from the neighbouring churches, may give some help.

There can be no doubt that the present church stands on the site of a former Norman one, Domesday Book mentioning a priest at Bottesford, though how old the church then standing may have been there are no means of judging. If there was a church on this site in the eleventh century, no doubt there was one also in the twelfth, and there is reason to believe that it has its influence in determining the form of the church we see to-day, even though none of its substance remains.

The church of the twelfth century was probably cruciform, consisting of nave, chancel, two transepts, and a crossing crowned by a large low tower, thus resembling many others of its age. The assumption that such was its original plan derives support from the present form of the church in two ways; the transepts are more likely to be inherited from a building of the twelfth century, in which they were common, than to be additions of the fourteenth or fifteenth centuries, in which they were more often suppressed, and the fact that the present nave and chancel are nearly equal in width, suggesting that their predecessors were so also, points rather to a cruciform church where the chancel would be equal in width to the nave than to a church with nave and chancel only where it would be narrower.

The church which stood at Bottesford in the twelfth century had I conceive a chancel equal in width to the present one but wanting one or possibly two bays of its length, a nave as wide and probably not much shorter than that now existing, a south transept nearly as wide as that we see to-day but not extending beyond the face of the present south aisle, and a north transept both narrower and shorter than the present one, fitting inside it, and of just the same size as its fellow on the south. The crossing formed by the intersection of the two alleys and bearing the tower would evidently be decidedly oblong in form since the transepts were narrower than the nave and chancel, but central towers of churches in the twelfth century were often oblong, and I believe that cases might be found where the departure from the true square is as pronounced as I am supposing it



here. The four piers supporting the tower would come thus, the two eastern ones in a direct line with the east wall of the present south transept, and the two western ones just to the east of the western pillars of the present crossing.

This aisleless cruciform church would probably undergo such alterations as were made elsewhere to meet the needs of an increasing population. Aisles, no doubt much narrower than those which exist at present, were probably added to the nave in the thirteenth century or perhaps before the close of the twelfth, and it is evident that the addition of aisles would entail nave arcades, and arches of entrance from the aisles to the transepts. It is certain that aisles were added to the chancel in the first half of the thirteenth century somewhere about the years 1220-30 because remains of the arcades which gave access to them from the chancel still exist on either side of it. (The pillars which support this arcade are shown on the plan in solid black.) The arches are exceedingly plain, consisting merely of two chamfered orders; the pillars, recalling those of Thurgarton Priory church, were in some cases surrounded with eight shafts, four detached and of stones in long lengths, four attached and of coursed masonry; the easternmost pillar on the south side exhibits the dog-tooth ornament and a capital with foliage; the rest of the capitals are merely moulded.

The next step in the enlargement of the church is an important one, since it is the earnest of a great scheme which would have amounted to a rebuilding of the whole church. The intention I conceive was this, to lengthen the chancel eastward and to build new aisles to it longer and wider than the old ones, to enlarge both transepts in width and length, to build new and wider aisles to the nave, and to abolish the central tower, replacing it by a new one at the west end of the church. It is evident that all or much of this alteration could be carried out without rendering the church already existing unfit for use during its progress, a condition which would be of weight to-day, and was of greater weight in the middle ages. The new bay could be added to the chancel before the old east wall was taken down; the new aisles in all cases could be built round the old ones and they not taken down till the new ones were nearly finished; the new transepts in the same way could be built round and over the existing transepts without disturbing them, and only when it was time to demolish the old central tower would the use of the church be seriously interrupted.

But it is evident that alteration could not be confined to the outside walls, since the new widths of the transepts would entail a larger crossing, and its pillars would fall one pair just to the east of the old eastern pair, and the other just to the west of the old western pair, the arcades therefore both of nave and chancel being shortened would of necessity require some remodelling.

This ambitious and comprehensive scheme was never carried out in its entirety, although it was begun. A bay was added to the chancel, the north transept or rather its northern and western walls were built outside the old transept, which no doubt was left standing, and the base of a pillar, the north-western of the intended crossing, was set. These works would appear from their details to belong to the beginning of the fourteenth or the end of the thirteenth century.

At this point the work seems to have been suspended, for the next addition to the church, the widened south aisle, can hardly be assigned to a date earlier than 1340, and it is doubtful whether the builders of this aisle were following the same scheme of which the new north transept formed a part. I am rather disposed to think that they had in their minds a church such as that of Newark, whose aisle walls are continuous from end to end of the church, and that with this design in their heads they built their new south aisle equal in width to the depth of the transept, so that the south walls of transept and aisle were continuous. Granted that this was the case, it is clear that there was no reason why the windows should be spaced with any reference to a transept whose existence as a separate feature had ceased, and so we might find a window in the position of the easternmost one in the south aisle, which is quite incompatible with any intention on the part of its builders to repeat on the south side the larger transept already half built on the north.

The south aisle can have been finished but a short time before the Black Death. The next stage in the alteration of the church must have taken place during the prevalence of that pestilence or directly after it. One of the most remarkable points brought before the notice of the Institute during its visit to Nottinghamshire is the large amount of building which by the poverty of its details and workmanship may reasonably be attributed to this period; and it is greatly to be wished that someone should collect the examples of such work and connect them with such documents as may be available. The work of this period at Bottesford seems to me to be somewhat as follows.

The north arcade of the chancel was walled up so as to convert the old aisle into a vestry, communicating with the chancel by a low door of feeble design. The south arcade was at any rate partially demolished and replaced by a wall pierced with three windows of three lights each, having uncusped ogee shaped heads, very debased, but imitating in their mouldings the east window of the chancel; at the same time the south aisle of the chancel was taken down. The curtailment of a church during the Middle Ages is a somewhat remarkable fact, though there can be no doubt that it took place here; but I feel that it needs more explanation than I can see for it. The central tower was taken down and also the old north transept, which had then stood for some fifty years within the unfinished larger transept designed to supersede it. But instead of completing this larger transept as had been intended with an east wall parallel to its western one, and abutting on a pillar to the east of the old north-east pillar of the crossing, the builders of this period economized by using part of this old pillar and canting the wall westward in order to hit it, thus narrowing the transept from the north towards the south. The old south transept was preserved and the eastern walls of the two connected by a chancel arch necessarily set askew. The two eastern pillars of the crossing were finished with responds jutting eastward and the larger space available on the north side was utilized to contain a staircase leading to the rood-loft. The north-western pillar of the enlarged crossing, or at least its base, had been set some fifty years before; another pillar was now set opposite, whose debased mouldings contrast strangely with

those of its older companion; a new respond was also built (thus reviving the idea of a south transept), taking its start from the wall of the south aisle and bearing at its other end an arch which abutted on the new south-west pillar; but this respond again could not be at right angles to the main axis of the building, as it should have been, lest it should block the easternmost window of the present south aisle; so it was built askew. At the same period new nave piers and a western wall were built, and arches sprung from pillar to pillar bearing a small portion of wall and a high pitched roof whose marks are still visible at either end of the nave. I should be inclined to assign the low pitch of the roofs over chancel and north transept to the same date; for with a low pitch the gable windows of each had to be cut short; and the remodelling of their upper parts to meet this necessity is in the same style as the windows on the south side of the chancel. Of the aisles to the nave that on the south had already been rebuilt on an enlarged scale; but on the north the old and narrow one was retained. This view of the history of the north transept and aisle derives some confirmation from a rough break which occurs in the masonry of the west wall of the north transept; this wall according to the original scheme would have been built only long enough to reach the wider aisle which was intended: but when it was decided to keep the old and narrow aisle, it was obviously necessary to extend the wall further; and I would suggest that the break I have mentioned shows the junction of work built about the year 1350-60 with the older work of 1290-1310.

The works carried out during the period of the Black Death did, after a fashion, render the church complete, full of irregularities as it was: it is difficult to date the work with any exactitude, but I noticed some small features about the bases of the nave arcade which occur also in the neighbouring church of Strelley which, as Mr. Hope pointed out, was certainly being rebuilt in the year 1356.

It was not long before the work of enlargement was once more resumed, probably late in the fourteenth century or early in the next. First the fine western tower and spire were built. Then came, in an order which can now be hardly distinguished, works in the south transept and vestry, and the widening of the north aisle of the nave to match that on the south. Of the old south transept much remained; its east wall on the line of the present one; its south wall flush with the south wall of the adjoining aisle; while its west boundary consisted of a respond and arch passing in an oblique direction from close against the easternmost window of the south aisle to the south-west pillar of the crossing. The alterations involved increasing this transept to the length of its fellow on the opposite side, while its width was governed by the old east wall whose foundations at least were retained, and by the canted respond which connected with the south-west pillar of the crossing: but in order that the new west wall of the new transept should lie in a true plane it was necessary to conceal to a certain extent the cant of the respond; so its nose was widened by the addition of a large hollow chamfer, thus causing the strange appearance of this respond upon the plan. It will be noticed from the plan that the gable wall of the south transept is not really wide enough for the building it masks; for the western buttress does not project so far beyond the west wall

as the eastern buttress beyond the east wall. Now it will be observed at once that the width of the gable wall corresponds very closely to what I suppose to have been the width of the original transept; and it may be that its anomalous size is connected with the building that preceded it; if so my explanation of this part of the church is somewhat vitiated; for it would look as though this transept was built while the old crossing was still standing, and that both crossing and transept were widened contemporaneously and at some later date; on the other hand I would point out that, setting aside the evidence of the details on pillar and respond, there are no marks of a break in the work between the southern and western walls of the south transept; and the narrowness of the gable wall may be due only to a desire not to block light from the window of the south aisle.

The north aisle of the chancel already walled off and converted into a vestry seems to have been rebuilt in two parts; first a bay was added to it on the east; then it was itself taken down and rebuilt; the whole length was of the same height, but on the inside the full height was visible only in the new bay, as the old part was divided into two storeys; these were furnished with diminutive two-light windows, made thus narrow perhaps that no thief might get in and rob the church of the ornaments kept there.

From the date of these alterations no further modifications seem to have occurred in the plan; but at the end of the fifteenth century considerable works were undertaken in the upper portions of the building, consisting of new arches along either side of the nave, new arches between the aisles and transepts, and a clearstory and roof to the nave; we are given some help in dating these works by a shield of arms carved in the spandrel between the first and second arches on the south side of the nave; it bears the arms of John Marshall, Bishop of Llandaff, who in 1495 bequeathed 100 marks for masses to be said in the parish church of Bottesford, his native village. Opposite are the arms of the de Ros family, who may be supposed to have lent their aid to the work. The straight joint of the clearstory with the tower, showing the difference in date between them, is obvious.

Two unimportant alterations remain to be noticed; first the clearstory introduced into the chancel, presumably in the seventeenth century when the Belvoir tombs blocking as they do much of the light from the lower windows made something of the kind advisable; and second a further flattening of the roof of the chancel by which means the apex of the roof was brought below the crown of the chancel arch; the aperture thus formed was blocked up with boarding carried by a timber arch and bearing on its side towards the nave the royal arms and the letters V. R. It appears, however, that the alteration dates from before Queen Victoria's reign since the flatter roof is shown in the illustration given by Nichols in his history of Leicestershire.

In conclusion I wish to express my most hearty thanks for many valuable suggestions to my friends Mr. Brakspear, Mr. Hope, and Mr. Peers; and to Mr. Challenor Smith for information concerning the Bishop of Llandaff's will; without the help of these gentlemen this account such as it is could not have been written.

Mr. ARTHUR MARSHALL also contributed some remarks. He mentioned that in 1730 no less than eighteen out of the twenty-two clearstory windows were filled with stained glass, with the arms of Manners, de Ros, Espec, Belvoir, Mareschall, Jackson, and Staunton. The leaden coffins removed from Belvoir Priory at the suppression were still to be seen at Bottesford in the end of the eighteenth century, some having metal inscription plates fixed to them. Of the six bells the earliest dated from 1612.

Mr. HOPE described the magnificent series of tombs in the chancel, consisting of (1) a small Purbeck marble effigy of a knight that commemorated the heart burial of Robert Lord Ros at Croxton Abbey in 1285 (2 and 3) the alabaster tombs and effigies of William Lord Ros, K.G. (*ob.* 1414), and his son, Lord John Ros (*ob.* 1420-1), brought here from Belvoir Priory at its suppression; and (4 to 11) the monuments and effigies of the first eight Earls of Rutland and their countesses. There are also two good brasses to former rectors in the floor.

After lunch in the schoolroom, the drive was continued to Langar, where the church was described by Mr. HAROLD BRAKSPEAR, F.S.A. It is a fine cruciform building of the thirteenth century, with a central tower, chancel, transepts, and nave with north and south aisles and south porch. It has been severely "restored," and very little of the old stonework remains, except in the nave arcades, which are very good of their kind. The north arcade has a curious feature, the arches having a widely spaced dog-tooth ornament towards the aisle, and only a plain chamfer towards the nave. A great deal of fifteenth century woodwork remains in a fragmentary state, used up as panelling at the west of the nave, and made up into screens under the tower. In the north transept are two good sixteenth century alabaster altar tombs with effigies of the Chaworth family, and in the south transept several floor slabs and a fine seventeenth century canopied tomb of the Scropes. Langar Hall, close to the church, was the residence of Earl Howe, and some relics of him, notably a fine sea-chest, are there preserved.

The next stopping place was Wiverton Hall, where Mrs. Musters most kindly provided tea for the members. Mr. HAROLD BAILEY gave a short account of the Hall as follows:

Beyond what can be gathered from Thoroton and the existing portions of the ancient manor house of Wiverton, which consists of gate house and some few remains of the offices, nothing is known, and any attempt to describe it must therefore be based mainly upon what is found in the more perfect remains of manor houses erected at this period. Thoroton says that "Sir Thomas Chaworth had the King's licence to make a park here, who likewise granted him free warren in this place, whereby it was very probable that he was the chief builder of the principal mansion of his worthy successors and in our times made a garrison for the King, which occasioned its ruin, since when most of it is pulled down and removed, except the old uncovered gatehouse, which yet remains a monument of the magnificence of this family." He also says, "that there was a very good Chappell in the house, now ruinous with it." The stately character of the gatehouse indicates it as the approach to a building of considerable importance though it has less resemblance to a

fortified structure than to a comfortable residence for the porter and other household retainers, but as the introduction of gunpowder in warfare rendered the old mode of fortification in a great measure useless against an enemy, it caused the grim old bastioned approach, with its arrow slit openings and spiked portcullis, to give way, as in this case, to slender turrets, mullioned windows, handsome moulded arched gateways and other features of a more pleasing and domestic character.

The building, including the round turrets at the angles and the porter's room on the west side of the gateway, measures 56 feet by 30 feet, and is three stories in height, approached by winding stairs in the turrets and surmounted by a flat lead-covered roof. The uppermost range of the deeply mullioned windows has been removed or otherwise blocked up by the parapet to the sloping roof of the mansion, with which the gatehouse is now incorporated. The gateway has a fine moulded groined roof springing from carved corbels in the angles.

Wiverton House was built by the Chaworth family in the time of Henry VI. The work left, though mutilated, is seen to be of the last period of the fifteenth century.

The oldest engraving of the gatehouse appears to be by Thoroton, dated about 1676. No battlements are shown, and there are wooden mullions in the windows. There is an old oil painting dated 1801, showing the two doors to the gatehouse on the south side.

The old archway on the south side is clearly defined in the plaster work. Thoroton does not show either the buttress or small doorway. The latter is shown in the small painting previously mentioned, and there appears to be an arched doorway beside it. This was perhaps added in the seventeenth century, as was probably also the buttress, which if of fifteenth century work would have had a moulded weathering. The gateway was converted into a farmhouse at the end of the seventeenth century; previous to that it was in a ruinous state.

The windows on the first floor originally had mullions and cusped heads as the remains show. The cusping of the single light windows is clearly seen on the south side.

The battlements are undoubtedly modern, as none are shown by Thoroton.

The whole of the south side, that is the modern house, was built in 1814.

The day ended with a drive to Bingham Station, whence Nottingham was reached at 7.15 p.m.

The neighbourhood of Nottingham is not rich in examples of domestic architecture, and with the exception of Wollaton and Hardwick, no houses of the first importance were visited. The fine series of alabaster monuments and effigies formed a special feature of several excursions, and a good number of village churches were included in the programme, the elaborate fourteenth century work being very noticeable.

It has not been the fate of the Institute for many years to experience such bad weather as marked the opening days of the meeting, but in spite of this all excursions were well attended, and the number of meeting tickets taken, about one hundred and ten, is

PROCEEDINGS AT MEETINGS OF

a proof of the popularity of what may
successful meeting.

Wednesday, November

Sir H. HOWORTH, President, in

Mr. C. A. BRADFORD read a paper on "A Millom Church, Cumberland," exhibiting in illustration. The window is in the west aisle, which is apparently an addition of the fourteenth century, to the original nave window lies in its large size and late date, in the fourteenth century wall in which it occurs it contains tracery suitable to a two-light window. The trefoiled main lights and flowing tracery are simple, consisting of plain chamfers. The windows in this aisle are large, of three and four light. The details of the building give no clue to the reason why it should have taken this unusual form. Mr. A. JOHNSTON joined in the discussion.

Mr. R. L. HOBSON read a paper on "English Architecture," illustrated by lantern slides. The paper was published in the *Journal*.

The PRESIDENT and Mr. GREEN took part in the discussion.

Wednesday, December

Mr. EMANUEL GREEN, Vice-President, in

Dr. A. C. FRYER read a paper on "Font and the Seven Sacraments," which will be part of a very interesting series of lantern slides was given of the treatment of the various subjects.

On the conclusion of the paper, the President distributed some remarks.

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